OECD Reviews of Evaluation and Assessment in Education

STUDENT ASSESSMENT IN TURKEY

Hannah Kitchen, George Bethell, Elizabeth Fordham, Kirsteen Henderson and Richard Ruochen Li

In collaboration with unicef



OECD

OECD Reviews of Evaluation and Assessment in Education: Student Assessment in Turkey

Hannah Kitchen, George Bethell,
Elizabeth Fordham, Kirsteen Henderson
and Richard Ruochen Li

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Foreword

Turkey has made remarkable progress in expanding access to education and improving quality over the past two decades. Yet, as the country's young people near the end of schooling, nearly half lack basic competencies for life and work. Aware of the need to ensure that all children have a fair chance to do well, the Ministry of National Education is reforming education to better meet the individual needs of each student.

This review was undertaken as a partnership between the OECD and UNICEF. The co-operation between our two organisations has meant that the review has benefitted from our complementary experience and expertise of Turkey's education system, and international research and best practice.

The review was commissioned by and developed in close partnership with the Ministry of National Education. The ministry asked for advice on how student assessment – including teachers' classroom assessments, national examinations and the national assessment – can best support learning. To support the country's ambition that all students develop the complex, transversal competencies that are important in the 21st century, the report recommends:

- Developing national learning standards that help teachers clearly understand what the curriculum expects students to know and be able to do.
- Creating more assessment tools and more practical, hands-on professional development to help teachers use assessment practices more effectively in the classroom.
- Assessing a broader range of skills in the national examinations and adapting the examination in Grade 12 to certify achievement at the end of compulsory education.
- Using the new national assessment to provide formative information for students and teachers during schooling.
- Using the wider evaluation system – of teacher appraisal, school evaluation and system evaluation – to promote better assessment and learning.

This review comes at a time of major change in Turkey's education system. During the review, important reforms to the national examinations, teacher appraisal and school evaluation were underway. A new national strategy for education – Vision 2023 – was published. The ambition of these reforms is significant and it has not been possible to fully analyse or integrate all the planned changes. However, the review discusses many of the policy options that now face Turkey, providing recommendations to create a system where a broader range of assessments is used to meet individual learners' needs.

We hope that the review will be a useful reference and guide for Turkey as it reforms assessment and education to promote excellence for all.

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The OECD review team was led by Elizabeth Fordham, OECD Secretariat, co-ordinated by Hannah Kitchen, OECD Secretariat, and included George Bethell (Director, Anglia Assessment, United Kingdom), Kirsteen Henderson (external expert, Canada), Ruochen Richard Li (OECD Secretariat), Soumaya Maghnouj (OECD Secretariat) and Roger Murphy (Professor, University of Nottingham, United Kingdom). We would like to thank Laila Massaia, who provided valuable linguistic support. Within the OECD Secretariat, we would also like to thank Manuela Fitzpatrick, Aanya Niaz and Sakshi Mishra who made very helpful contributions to the report. The review team also acknowledges the support and contributions from Andreas Schleicher, Director for

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Abbreviations and acronyms

ABİDE	*Akademik Becerilerin İzlenmesi ve Değerlendirilmesi* National Assessment of Student Learning
AYT	*Alan Yeterlilik Testleri* – Field Qualification Test
EBA	*Eğitim Bilişim Ağı* Educational Informatics Network
ECEC	Early Childhood Education and Care
ESCS	Index of Economic, Social and Cultural Status
GDP	Gross Domestic Product
ISCED	International Standard Classification of Education
ISP	Individual Student Plan
KPSS	*Kamu Personel Seçme Sınavı* Public Service Personnel Selection Examination
LYS	*Lisans Yerleştirme Sınavı* Undergraduate Placement Exam
MEBBIS	Ministry of National Education Information System
MEES	General Directorate of Measurement, Evaluation and Examination Services
MoNE	Ministry of National Education
NEET	Not in Education, Employment or Training
ÖABT	*Öğretmenlik Alan Bilgisi Testi* Teacher Content Knowledge Examination
OCR	Optical Character Recognition Technology
OECD	Organisation for Economic Co-operation and Development
Ofsted	English School Inspectorate
OMR	Optical Mark Recognition Technology
ÖSYM	Ölçme, Seçme ve Yerleştirme Merkezi Measurement, Selection and Placement Centre
PPP	Purchasing Power Parity
PIAAC	OECD Programme for the International Assessment of Adult Competencies
PIRLS	Progress in International Reading Literacy Study
PISA	OECD Programme for International Student Assessment
PLANEA	*Plan Nacional para la Evaluación de los Aprendizajes* National Plan to Evaluate Learning
PMM	Provincial Metropolitan Municipalities
SEN	Special Educational Needs
SPA	Special Provincial Administrations
TALIS	OECD Teaching and Learning International Survey
TEOG	*Temel Eğitimden Ortaöğretime Geçiş Sistemi* – Transition from Elementary Schools to Secondary Schools Exam
TIMSS	Trends in Mathematics and Science Study
TYT	*Temel Yeterlilik Testi* Basic Proficiency Test
UNICEF	United Nations Children's Fund
VET	Vocational Education and Training
YGS	Yükseköğretime Geçiş Sınavı Transition to Higher Education Examination
YÖK	*Yükseköğretim Kurulu Başkanlığı* Council of Higher Education

Executive summary

In many respects, the Turkish education system stands out internationally as a success story. Major investments in the school system in the early 2000s have resulted in a vast expansion of participation. By 2015, participation in primary and secondary school had become universal. Among the upper secondary school population, the country outperforms other middle-income countries, with enrolment rates increasing by 70% since 2005. The universalisation of education is even more remarkable because learning outcomes improved over the same period.

Yet, the education system is also marked by disparities. Students growing up in less developed regions are almost 20% more likely than their peers in the most developed regions to leave school before completing compulsory education. Of those aged 15 and in school, only around half are gaining the essential competencies they need for life and work. Results from the OECD Programme for International Student Assessment (PISA) in 2015, found that 40% of 15-year-olds had not developed basic reading and writing skills and 50% had not developed basic mathematics skills (Level 2).

The Turkish education system is driven by an ambitious reform agenda. The government is focused on how quality and equity can be improved so that all students can do well. This review provides recommendations to use student assessment more effectively to support better learning outcomes.

Ensuring national goals provide a coherent vision to guide assessment

The curriculum provides the basis for student assessment. In Turkey, far-reaching curriculum reform over the past decade has focused instruction on competency-development and the individual needs of each student. However, the ambition has not yet been fully translated into practice. Assessment in many classrooms continues to be characterised by questions that privilege memorisation rather than complex competencies like critical thinking and problem solving. One reason is that teachers do not have a complete understanding of the curriculum's expectations and how this impacts assessment. Developing learning standards that clearly specify what students are expected to know and be able to do will help teachers better visualise more complex outcomes and guide their students towards these through assessment feedback.

Developing more effective assessment practices in the classroom

To assess the full breadth of Turkey's curriculum, teachers have to use different types of assessments. Turkey's teachers are comfortable, competent users of closed and short answer assessments like quizzes and multiple-choice questions. They are less confident in using more performance-based assessments like portfolios, investigations or essays. These types of assessment are important in a competency-based curriculum, however, because they compel students to draw on a wider range of knowledge and skills to construct their own answer. In the short term, Turkey can develop far more assessment tools, like assessment templates, diagnostic assessments and guidance on portfolios to help teachers use more diverse assessment types. This needs to be complemented by building practical,

hands-on opportunities to try out new assessment tools and techniques into initial teacher education and continuous professional development.

Positively influencing learning through the national examinations and assessment

The structure of schooling and higher education means that there is significant pressure to gain a place in one of the country's most prestigious high schools and, later, bachelor's programmes. The two national examinations in Grades 8 and 12 identify those students who will receive one of these places, meaning that they carry very high stakes. The stakes make transparency and objectivity imperative, meaning that the vast majority of examination items are multiple-choice questions capable of automatic scoring. This leads to teachers and students focusing extensively on preparing for a limited range of learning tasks.

Major examination reforms were introduced during the course of this OECD review, with the aim of reducing the stakes and encouraging broader learning. In particular, Turkey has sought to introduce more question items that are set in authentic contexts and assess higher order thinking skills. Creating an examination for certification of upper secondary will also provide meaningful recognition of the completion of compulsory education for students who do not progress to tertiary education, contributing to reducing the stakes of the examination in Grade 12.

Finally, using a national assessment to provide more data on learning outcomes during schooling will help to direct the actions of policymakers, schools and teachers to ensure that all students are enabled to reach national expectations. Over time, this will also help to raise the quality of all education options, reducing pressure on the few places in the most prestigious schools.

Using the wider evaluation system to promote better assessment and learning

The wider evaluation system of teacher appraisal, school evaluation and system evaluation sets the standards for evaluating the quality of assessment practices in schools and classrooms. By setting national objectives for learning outcomes, it is also a major influence on where policymakers, schools and teachers focus their efforts. Turkey's evaluation system recognises the vital role of assessment for learning. However, it focuses the education system on a narrow definition of success – measured by grades. Also, it is not encouraging teachers and schools to engage in the full range of assessment practices that are important for learning.

Turkey's evaluation system is currently undergoing major changes. The new systems for teacher appraisal and school evaluation should be developed with a close eye towards encouraging the assessment behaviours that are important in classrooms and schools, such as understanding what makes a good assessment, being able to use and develop assessments, and investing in professional development opportunities. A critical step will be to revise national goals for learning outcomes. Focusing these on the achievement of national learning standards, based on reliable assessment data, will be a strong force for communicating the transformation of what students learn, and how they learn.

Assessment and recommendations

Introduction

Since the OECD review of education in Turkey in 2007, the country has achieved a major expansion of school participation at the same time as significant improvements in the quality and equity of student learning outcomes. However, the gap in educational achievement compared with most member countries of the Organisation for Economic Development and Co-operation (OECD) remains wide and represents a constraint for future growth and productivity (OECD, 2016[1]). International data shows that while more students than ever before are reaching basic levels of numeracy and literacy, a large share of those entering high school still has weak foundations in these essential domains (below Level 2 in the OECD Programme for International Student Assessment [PISA]). Conversely, only 1% of students in Turkey demonstrate, by age 15, the types of higher order skills needed to participate fully in a modern knowledge economy, and this share has not increased in more than a decade (Level 5 and above in PISA) (OECD, 2016[2]).

Turkey recognises that improving the quality of student outcomes is both a social and economic imperative. This objective has informed over a decade of major curriculum reforms, aimed at shifting the focus of schooling from the memorisation of content knowledge to a competency-based approach focused on active learning and higher-order skills. However, while the direction of change is positive, the impact of reforms on classroom instruction has been limited by assessment practices that have not evolved in line with recent reforms.

It was with a view to addressing the disconnect between Turkey's ambitions for student learning and assessment, and this reality that characterises many classrooms, that Turkey commissioned this OECD review. Specifically, the country requested recommendations on how to improve teachers' assessment practice so that it better supports student learning and is more aligned with the curriculum. The OECD was also asked to look at ways Turkey could enhance the positive contribution of national examinations to student learning, and reduce their negative impact, including with respect to student well-being and equity, by concentrating students from the most advantaged backgrounds in the country's most prestigious schools.

On-going reforms

This OECD review was undertaken at a time of significant change in Turkey's education system. Following the review team's missions to Turkey, major reforms were introduced to the examination system, and new systems for teacher appraisal and school evaluation were being developed. A new national plan – the Vision 2023 – was also developed (see Box 1). The direction of many of these changes reflects the recommendations in this review. However, in many cases, the timing means that it has not been possible to provide a thorough analysis of the planned changes. Equally, while the review has tried to address some of these reforms, it has not been possible to reflect all. Most notably, the plans set out

in the new national vision have not been included in the main body of the report due to timing.

Box 1. Turkey's new Education Vision for 2023

In 2018, Turkey published an ambitious new vision to transform its education system. Central to the vision is creating a more student-centred approach to learning, where teachers adapt instruction to the needs and interests of individual students.

In order to achieve this vision, the country plans to use assessment to better support learning, which is also the focal point of this review. According to the vision, assessment will be adapted to focus less on marks and examination results and more on monitoring the development a student's competencies, using the information to guide their future decisions and pathways, by:

- Introducing a new "competency-based assessment system" to monitor students' competency development.
- Providing in-service teacher training to improve teachers' assessment skills, led by a nationwide network of Assessment and Evaluation Centres
- Implementing an e-portfolio to record student learning from early childhood to the end of schooling with a view to enhancing both academic and social competencies.
- Creating a new system to monitor student learning, without grading, to inform decisions about students' pathways and courses.
- Reducing competition and pressure associated with the national examinations by addressing disparities across different schools and regions, and developing more flexible entrance systems. Over time, the number of students admitted to high schools via the competitive entrance examination will be reduced. Student placement will be based on their place of residence, regardless of exam scores.
- Restructuring national examinations to prioritise the assessment of higher-order skills like reasoning, critical thinking and interpretation.

The vision also addresses other important aspects of the overall framework for student assessment:

- Adapting the curriculum to be more flexible, modular and responsive to student interests.
- Making greater use of existing data systems, including the creation of a Data Monitoring Unit in the Ministry of National Education to encourage more data-based policymaking and more data-informed school management. The Ministry is also making more analysis and data available to the public.
- Reforming the teaching profession by making initial teacher education more practical and prioritising continuous professional development.
- Restructuring school inspection, to include both inspection and guidance for school development.

Many of the planned actions are in line with the review's recommendations. However, since the vision was published after the OECD review was drafted, it has not been possible to analyse these new initiatives in this report.

Source: MoNE (n.d.[3]), *Vision 2023 [2023 Eğitim Vizyonu]*, http://2023vizyonu.meb.gov.tr/doc/2023_EGITIM_VIZYONU.pdf.

Main trends: Participation and learning outcomes have improved, but further progress is needed to meet national goals

Participation in primary and lower secondary school is now universal but student drop out in upper secondary students is relatively high

Many of the challenges related to the quality of teaching and learning in Turkish schools need to be understood against the backdrop of the recent, dramatic expansion of access to education. Over the past two decades, Turkey has achieved one of the fastest increases in school enrolment within the OECD. Participation in primary and lower secondary school became universal in 2015 and enrolment in upper secondary education increased by 70% between 2005 and 2015.

However, a relatively high share of students (20% in 2015) still leave school before the end of upper secondary education. This is the consequence of a number of factors, including the wide variations in quality across different types of high schools. It also reflects how assessment is used in Turkey. First, the absence of an examination that provides recognised certification of achievement at the end of compulsory education, which in many countries provides an incentive for learning and completion. Second, the small role that student choice and genuine aptitude have played up until very recently in determining the high school that a student attends.

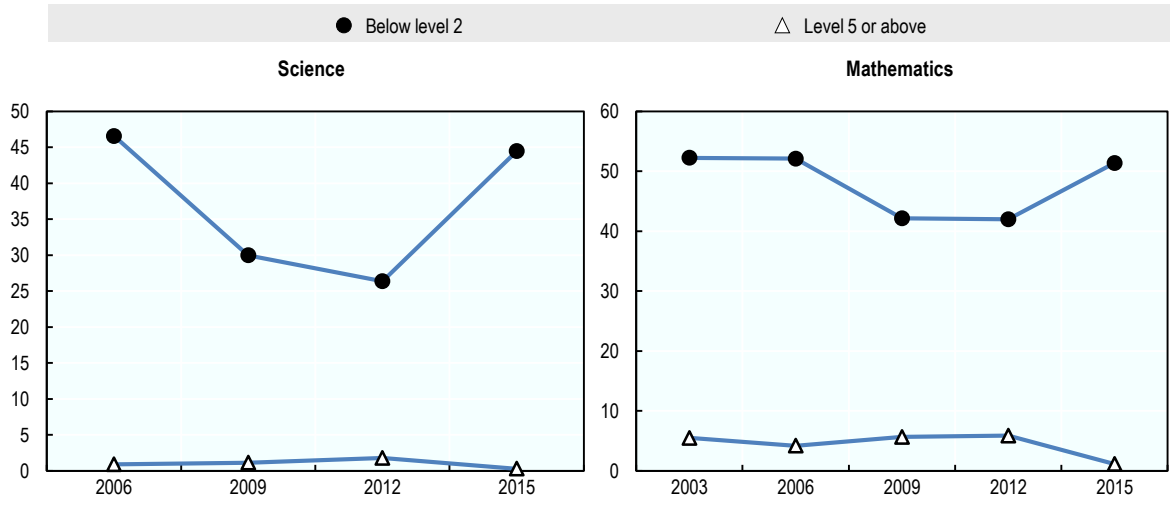
Graduation from tertiary education has also risen dramatically

Tertiary graduation rates have increased threefold since 2000 (OECD, 2017[4]). Much of this growth has been enabled by an expansion of short-cycle programmes, with the share of new entrants to bachelor's programmes (55%) well below the OECD average (72%) and far behind student demand (OECD, 2017[4]). This results in significant pressure on students to do well in the national examination that controls access to tertiary education. While over two million students on average take this examination each year, there are only places on the most sought-after bachelor's programmes for approximately a quarter of candidates (MoNE, 2014[5]).

Student learning outcomes improved significantly between 2003 and 2012

The share of Turkish students who do not acquire basic skills by age 15 (below Level 2 in PISA) has declined substantially. Between 2003 and 2012, the percentage of students who lack basic proficiency in mathematics fell by 10 percentage points, the sharpest reduction among the OECD countries, after Mexico. However, learning outcomes remain low compared to the OECD average. Forty percent of students in Turkey do not demonstrate basic literacy by age 15 and more than half do not reach basic numeracy levels (below the PISA 2015 proficiency Level 2 in these two domains) (Figure 1). These rates are even higher in rural, disadvantaged areas, such as the eastern provinces of Turkey (UNICEF, 2012[6]).

Figure 1. Percentage of low achievers and top performers in the PISA science and mathematics tests, 2003-15)



Source: OECD (2016[2]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

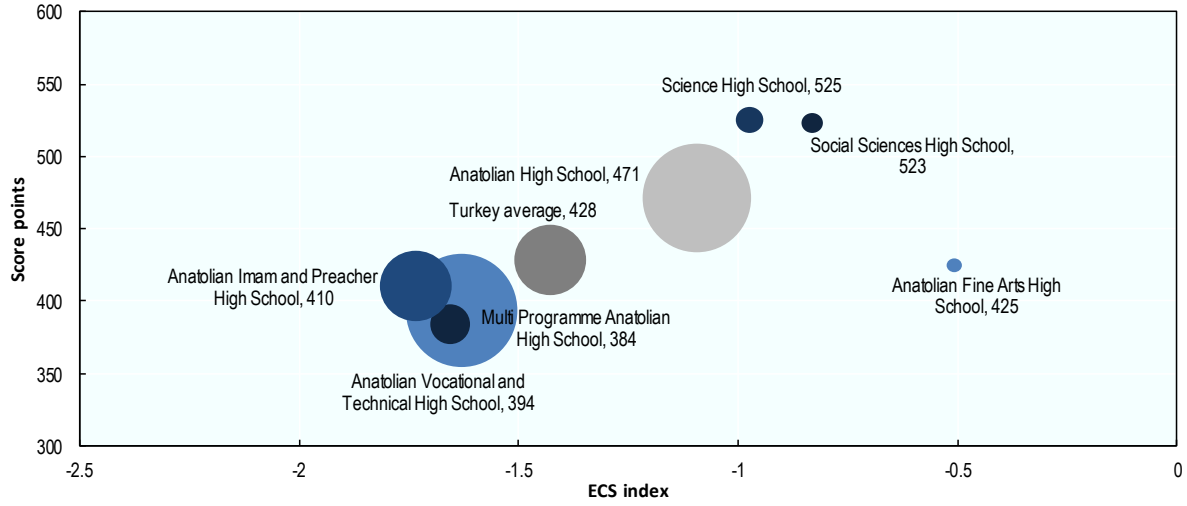
Selection for the most prestigious high schools accentuates disparities

While equity in learning outcomes has also improved over the past decade – in PISA 2015, students' socio-economic background explained 9% of the variation in science performance compared to 16% in 2006 – the use of a competitive examination to determine high school placement contributes to disparities in educational access. Almost half of the students in the country's most prestigious high schools – the science and social science high schools - come from the top quintile according to the PISA Index of Economic, Social and Cultural Status, while only about 10% of students are from the least advantaged quintile. Turkey's recent change to high school placement, which means that most students will attend their local high school, aims to encourage more equitable access. However, the continued use of the High School Placement Exam will still result in inequities in access notwithstanding important efforts to expand the number of available places in schools where there is high demand.

Students' outcomes frequently reflect the type of high school that they attend

In Turkey, ensuring more equitable access to high school will help to ensure that students from all backgrounds receive a good quality education and have a fair chance to pursue the tertiary education opportunities that interest them. At present, learning outcomes across the different types of high schools differ significantly. In PISA 2015, students from the prestigious science high schools performed the equivalent of over three school years above their peers in vocational and technical high schools (Figure 2).

Figure 2. Average reading score and average ESCS by type of school (PISA 2015)



Note: PISA ESCS is the PISA Index of Economic, Social and Cultural Status. The size of the bubble represents the sample size in PISA 2015.
Source: Authors' calculation based on OECD (2016[2]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

Students in Turkey's prestigious high schools are also much more likely to perform well in the national examination at the end of compulsory education that controls access to tertiary education. In 2016, 54% of graduates from science high schools went on to study for a bachelor's degree, compared with 23% of graduates from general high schools and just 8% of those from vocational and technical high schools (MoNE, 2016[7]). The disparities in student outcomes across the different types of high school mean that the national examination in Grade 8 that is used to determine student placement to the different high schools carries very high stakes. It was reported to the OECD review team by students, parents and teachers that this puts considerable pressure on students and families to gain access to the best schools, and in the past has fuelled a large system of private tutoring.

The role of student assessment in improving learning outcomes in Turkey

This review analyses how the different types of student assessment – teachers' classroom assessments, national examinations and national system-level assessments – are currently used in Turkey and provides recommendations on how they can be improved to better support student learning (Table 1). In this, the review draws on the OECD analysis of policies and practices for student assessment in over 30 education systems (see Box 2). This work has identified approaches that are effective in advancing the learning of all students as well as the types of standards, capacity and tools that underpin these. It also looks at how countries use assessment data to inform policy and practice, and shows how the wider evaluation and assessment system can be developed to promote better assessment and, with this, better learning.

Since the 2007 OECD review, Turkey has taken positive steps to improve the integrity and quality of national examinations. These include introducing a common, centralised

examination set by the ministry, Transition from Elementary Schools to Secondary Schools Examination (*Temel Eğitimden Ortaöğretime Geçiş Sistemi*, TEOG). Steps have also been taken to assess a broader range of knowledge and skills in the examination at the end of compulsory education. These include introducing some constructed response items (where only multiple-choice questions were used in the past) and items that assess problem-solving skills in authentic contexts.[1]

There have also been efforts to improve the learning value of classroom assessment. The new curricula introduced since 2006 have encouraged teachers to conduct formative and performance-based assessments as part of a more student-centred, competency-based approach to teaching and learning. National regulations limiting teachers' use of summative assessment in the early grades of primary and multiple-choice assessments in the latter grades also aim to encourage teachers to use a broader range of assessments types and focus on how assessment can be used to support learning.

Table 1. Types of student assessment

	Classroom assessments	National or state examinations	National or state assessments
Definition	Designed and marked by students' own teachers and implemented as part of regular classroom instruction.	Standardised examinations with a formal consequence for students (high stakes). Frequently designed and marked outside individual schools.	Standardised assessments without formal consequences for student progression through school or certification (low stakes). Frequently designed and marked outside individual schools. May be taken by a whole student cohort or by a sample of students or schools that is nationally representative.
Purpose	To summarise learning that has taken place, for example at the end of a learning unit or grade (summative). To check for understanding during the learning process to identify learning needs, provide feedback to students and adapt teaching strategies (formative). Frequently takes place in the absence of marks. One type of formative assessment is diagnostic assessment at the beginning of a school year or learning unit to identify students' starting points.	To mark or certify student achievement with formal consequences for students, such as impacting eligibility to progress to a higher level of education or to complete an officially recognised diploma (summative).	To provide teachers with diagnostic information about student learning in line with national curriculum standards (formative). To monitor learning nationally and monitor trends over time (system monitoring).

Sources: OECD (2013[8]), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, http://dx.doi.org/10.1787/9789264190658-en; OECD (2015[9]), *Education at a Glance 2015: OECD Indicators*, http://dx.doi.org/10.1787/eag-2015-en.

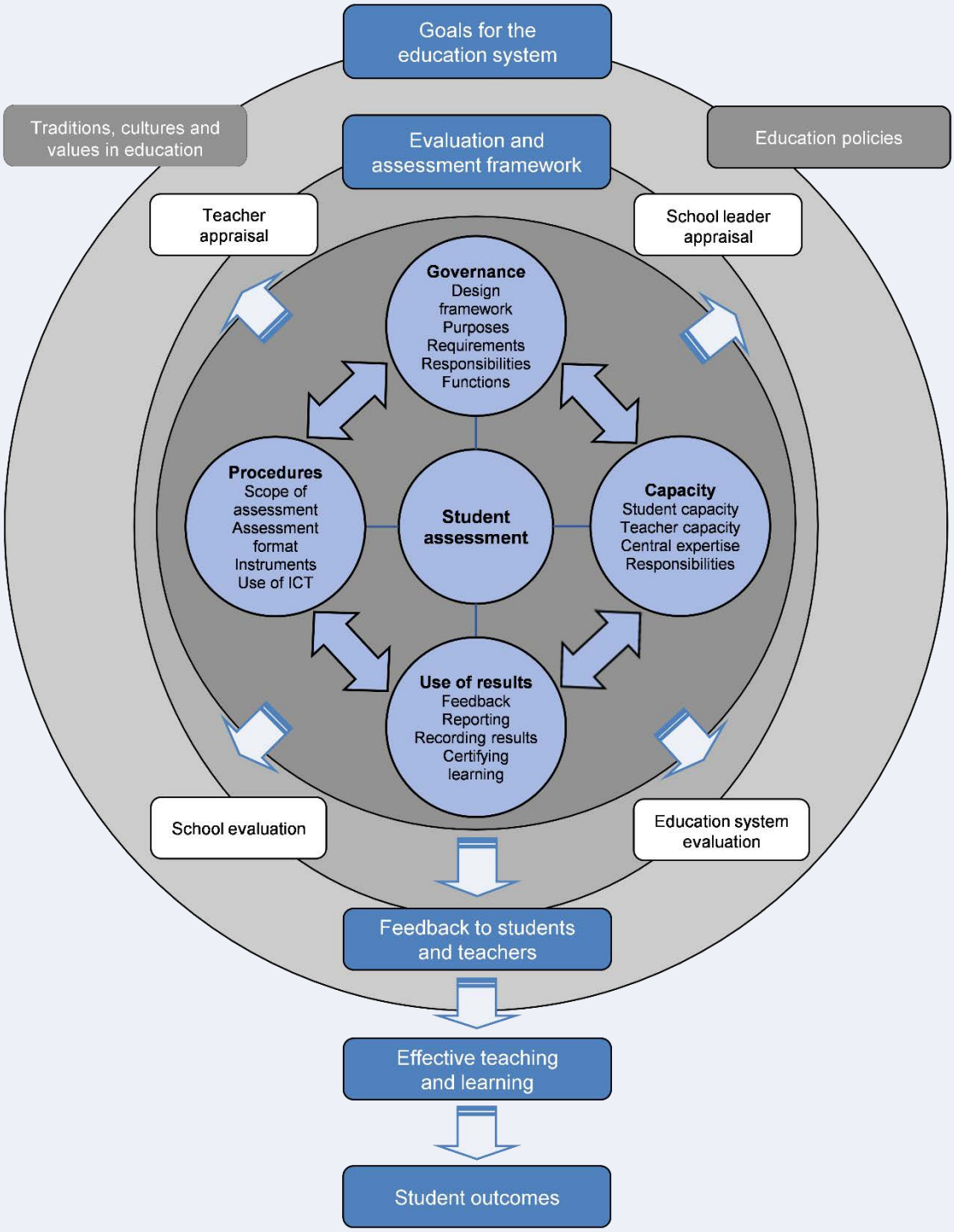
During this review, Turkey also announced a number of changes which create opportunities to use assessment in ways that improve learning and equity. These include important changes to the national examinations for high school and tertiary placement. Plans to change teacher appraisal were also announced, and school evaluation was put on hold pending major reform. While the direction of these changes is positive in many respects, some changes have been introduced quickly and many questions about implementation remain. This review provides suggestions to help the country ensure that the planned changes have a positive impact. In doing so, the report identifies three overarching challenges in how assessment is currently used in Turkey, which should be at the centre of future reforms.

Box 2. OECD reviews on evaluation and assessment in education

The OECD reviews on evaluation and assessment in education developed a conceptual framework for student assessment that identified four systemic features with respect to how assessment is designed and used (see Figure 3). These four features of assessment impact teaching and learning practices, and ultimately student outcomes:

- **Governance of student assessment systems**: including the different purposes and objectives of student assessment and the frameworks in place to ensure that assessment results are used in a way that is consistent with these objectives.
- **Procedures and methodologies for student assessment**: including the scope of assessment, i.e. the areas of learning that are covered by the assessment and the key procedural features of student assessment across countries, i.e. the mix of instruments used in assessment systems and the format of assessments.
- **Capacities to assess students and to use the results of student assessment**: including the assessment competencies that teachers acquire in initial teacher education, and professional development and moderation arrangements.
- **How assessment results are reported and used for both summative and formative purposes**: including the ways in which assessment results are used in different contexts to record information, provide feedback to students and make decisions about their further educational trajectory.

Figure 3. Conceptual framework for student assessment



Source: OECD (2013[8]), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, http://dx.doi.org/10.1787/9789264190658-en.

Aligning assessment practice with national learning goals

While Turkey has revised its curriculum to emphasise deeper learning and transversal, 21st century competencies, a decade after these changes were introduced, assessment is still far from reflecting these goals. Assessment continues to be used in a way that encourages memorisation and the acquisition of knowledge in discrete domains. This is exemplified by the heavy reliance on closed-format questions – both in national examinations and in classrooms (Kan, 2017[10]). In these kinds of questions, students have to pick the right answer, rather than demonstrate a depth of understanding and apply critically what they have learned by constructing their own responses.

The review suggests incremental improvements to the national examinations so they are better aligned with the country's learning goals. Turkey has already started to experiment with different question items, and this review recommends making greater use of technology so that items where students must demonstrate more sophisticated, complex competencies can be introduced.

At the same time, teachers need more support to be able to assess skills and knowledge more deeply in the classroom. Clearly defining expected learning outcomes will help teachers to understand the changes that the curriculum implies for how they use assessment. Teachers should also be provided with more assessment resources, like how to use the new student e-portfolios that the country intends to introduce, to guide them in evaluating the development of the transversal competencies that national learning goals emphasise.

Achieving a greater balance between formative and summative assessment

Formative and summative assessments have a critical role in learning in all education systems. Summative assessment measures the learning that has taken place, for example at the end of a topic or level of education. In Turkey, national examinations provide an essential administrative function – allocating students to a limited number of prestigious high schools and tertiary education programmes. They are perceived to be fair and transparent, and there is public confidence in their integrity.

However, the national examinations' high stakes mean that they are also a major influence on the practices that take place in classrooms. Educators and society focus on summative marks as a measure of success and educational quality. This creates an environment where there is an overreliance in summative tests and students may feel discouraged from revealing what they do not know or making mistakes. As a result, it is difficult for the most important type of assessment for learning – formative assessment – to flourish. Through regular and frequent checks of learners' understanding, formative assessment provides information to help teachers and students adopt more effective strategies for learning.

This review recommends steps Turkey might take to reduce the weight of national examinations and achieve a better balance between formative and summative assessment. This involves changes to the structure of schooling, in particular encouraging greater flexibility between pathways to reduce the stakes of examinations, as well as the introduction of a school-leaving examination that is designed to certify the learning of all students and includes classroom tasks aligned with the curriculum. It also includes practical strategies to embed formative assessment in classroom practices, such as the introduction of a diagnostic assessment in primary education. Turkey has already taken steps in this direction with the recently introduced Student Learning Achievement Monitoring Assessment, Turkish Language Skills Study and Common Examinations initiative[2].

Using the wider evaluation system to encourage good assessment practice

The wider evaluation system – teacher appraisal, school evaluation and system evaluation – can be an important source of support for transforming education (OECD, 2013[8]). Through the goals set for teachers, schools and the education system overall, it focuses attention on what matters for teaching and learning. In Turkey, however, the wider evaluation system, like student assessment, is not aligned with what the curriculum values. In the absence of reliable and valid data on learning outcomes, system evaluation uses classroom test results to monitor performance. This information is not reliable and encourages the perception that high test results matter, rather than learning across the breadth and depth of the country's curriculum.

This makes Turkey's development and implementation of a new national assessment – Akademik Becerilerin İzlenmesi ve Değerlendirilmesi (*ABİDE*) – very important. *ABİDE* has the potential to provide the means to understand better what is impeding some students from making good progress. A national assessment can also help to improve teachers' assessment skills – providing an external benchmark of student learning and examples of how to assess 21st century competencies and higher-order skills. The new assessment initiatives mentioned above are intended to further support these goals by providing teachers and schools with more reliable, comparative information on student learning.

Promoting national goals for student learning

Turkey's learning goals focus on the mastery of competencies in order to prepare students to be productive citizens in the 21st century. Teachers are expected to engage in student-centred instruction and use formative assessment techniques to continuously monitor and improve student learning. While the direction of the curriculum reforms since 2006 has been positive, there is considerable evidence that the intended changes have not fully taken effect in Turkish classrooms. National research (Topcu, 2014[11]) and OECD interviews signal that teaching and learning processes remain focused on knowledge memorisation instead of competency development. This report argues that while this is explained in part by gaps in teachers' knowledge and skills and the predominance of high stakes examinations, it is also a consequence of a lack of clarity and consistency within the curriculum and how it has been communicated.

Notably, while the curriculum should orient teaching and learning practice, it sometimes lacks clarity and consistency with respect to national learning expectations. Interviews conducted by the OECD review team revealed that many educators need to be better supported to understand what is meant by a constructivist pedagogical approach, which is not explicitly explained in curriculum documentation. The same is true of other central concepts, such as 21st century competencies. There is likewise a tension between the way learning outcomes are described in national "gains tables" – in a way that is often prescriptive, with specific lists of what students should know and a timetable for when this knowledge should be acquired – and a constructive, competency-based approach to learning.

There is also scope for stronger public communication around national learning goals. Turkish parents and society more broadly place great value on education, with parents investing significantly in private tutoring for children and following their grades in real time through mobile phone applications. This drive to demonstrate success in national examinations needs to be matched by more attention to the deeper learning that the country's curriculum aims to foster. International experience shows that investments to

explain and make visible desired changes in learning can provide valuable support for curriculum reform, especially by showcasing success at the school level. Bringing technical support for instructional improvement closer to schools is also an important lever for change.

Policy issue 2.1. Developing a curriculum framework to give greater coherence and clarity to national learning goals

While the direction of curriculum reform in Turkey has been positive – in terms of focusing on the competencies that are important in modern economies and encouraging a more learner-centred approach – the curriculum needs to better help teachers and schools to understand and apply these changes. In particular, the curriculum should help teachers to understand the rationale for focusing on competency development and constructivist pedagogy, and what both mean for teaching and learning in Turkey's schools.

Alignment across different domain and education level curricula could also be improved. In Turkey, these curricula are developed by different General Directorates in the Ministry of National Education. The review team's analysis suggests that this has resulted in curricula which are not always aligned in terms of expectations for student learning. It also means that support for transversal competencies – which each subject needs to contribute to – is not always consistent or as strong as it might be.

Box 3. Recommended actions for a curriculum framework

2.1.1. Develop a unifying national curriculum framework to improve the coherence of the overall curriculum and help teachers to understand the value of a competency-based, constructivist approach and what it means for their classroom practice. This can be achieved by:

- Including a vision statement that sets out Turkey's overarching goals for learning, consolidating ideas that are currently spread out across different national education documents.
- Explaining the differences between knowledge-based learning and competency-based learning for classroom teaching and the importance of competencies in modern economies.
- Explaining what is meant by 21st century competencies and providing a list of the most important competencies in the Turkish context.
- Explaining the theories that underpin constructivist pedagogy and providing examples of how this approach differs from traditional, behaviourist approaches.

2.1.2. Use the curriculum framework to guide future revisions of individual domain curricula and materials such as textbooks and assessments. Future revisions of the curricula for different domains should include detailed examples of suggested classroom activities aligned with constructivist pedagogy so that teachers are clearer about what they are expected to do to promote more student-centred teaching and learning.

Policy issue 2.2. Developing learning standards to help teachers understand what students are expected to know and be able to do

In Turkey, teachers rely on "gains tables" that set out expected learning outcomes by month and week to ensure that teaching and learning follow national objectives. The prescriptive nature of these gains tables does not support a student-centred, competency-based approach where teachers need the flexibility to be able to respond to students' different starting levels, how quickly they master content and their interests. The outcomes in the gains tables also frequently focus on knowledge that should be acquired, such as specific lists of items that students are expected to know, rather than students' ability to draw on a range of different knowledge and skills to demonstrate competency in different contexts. In contrast, many of the OECD countries that have succeeded in embedding a competency-based approach to teaching and learning have invested significantly in developing learning standards that clearly set out what students are expected to know and be able to do at key stages and in core domains, alongside more detailed outcomes for individual topics or units of learning.

Box 4. Recommended actions for learning standards

2.2.2. Develop learning standards which define what students should know and be capable of doing in core subjects by individual grades. Learning standards should also set out the levels of aptitude at which students might demonstrate competencies (e.g. basic, proficient and advanced). This would encourage teachers to assess student progress towards integrated learning goals, rather than focusing on whether a student provides the correct response or not to a discrete question. Learning standards would also provide a consistent point of reference as to what should be assessed in both teachers' classroom assessments and national assessments and examinations, helping to enhance validity and reliability across the assessment system.

Policy issue 2.3. Communicating national learning goals to society to build trust and support for change

The change in teaching and learning that is envisaged by Turkey's learning goals is profound. While the 2017 curriculum revisions included public consultations, the importance of competency-based learning and constructivist pedagogy are still not widely understood and parents and society continue to associate student success with being able to recall a set body of knowledge as measured by time-pressured, multiple-choice questions in national examinations. Helping the wider public to better understand Turkey's learning goals will mean that schools and teachers feel more supported and trusted by their communities when they introduce changes. Schools would also benefit from more local technical support on how to implement the new approaches for teaching, learning and assessment in often challenging local contexts.

Box 5. Recommended actions for communicating national learning goals

2.3.1 Make national learning goals more visible through a communication campaign that explains the rationale for the changes in teaching and learning to build societal understanding and support. Showcasing examples of schools that are successfully implementing these changes can help community members to better understand new learning approaches and build momentum for reform. Matching a national strategy with provincial campaigns will be important to show how Turkey's vision is achievable in diverse contexts and ensure that rural and isolated areas of the country are not left behind. The 2023 Vision Media Campaign has the potential to make national learning goals more visible.

2.3.2. Expand local support for schools to improve the responsiveness of assistance to schools as they implement curriculum reform. For example, provincial and district education directorates can provide more technical support to local schools on how they can introduce changes to teaching and learning. Provincial directorates might also be expected to work horizontally to promote peer-learning networks across regions, and to encourage the creation of similar school-level networks within provinces.

Improving teachers' classroom assessment practices

Since Turkey introduced a competency-based, constructive curriculum over a decade ago, teachers have been encouraged to conduct formative and performance-based assessments. However, teachers indicate that they still prefer to use "short, easy and practical" assessment methods like multiple choice tasks, and are not aware of the importance of using a broad range of assessment types (Kan, 2017[10]). Moreover, while the curriculum and school regulations provide teachers with considerable autonomy in terms of the assessments that they use – only specifying minimum and maximum numbers of assessments to be conducted and encouraging diversity in terms of the assessments used – teachers rarely exercise this autonomy and frequently rely instead on centrally provided tests such as those in textbooks (Kan, 2017[10]). In contrast, in many other OECD countries where a competency and learner-centred approach is well-established, teachers frequently adapt and develop their own assessments to respond to the individual needs of the students in their classrooms.

In recognition of the challenges that teachers in Turkey experience in using assessment in ways that best support learning, the Ministry of National Education has recently developed a number of promising projects. These include the development of a new online portal – *EBA* – which encourages teachers to share assessment resources with each other, and a pilot school portfolio to help teachers document a wider range of students' academic achievements as well as extra-curricular activities over the years. A different project is also underway, led by the General Directorate of Measurement, Evaluation and Examination Services in the ministry, to build confidence and capacity among teachers to help them to use formative assessment.

This review provides recommendations on how these initiatives can be further developed to expand the range of quality assessment resources across more subjects and in particular help teachers assess the more complex learning outcomes valued in the curriculum. It also suggests how continuous professional development and initial teacher education can be

improved so that teachers develop a stronger understanding in assessment and have opportunities to practice with different assessment tasks.

Policy issue 3.1. Providing teachers with richer assessment resources that support competency acquisition

Teacher classroom assessments have a powerful impact on student learning. When well designed, they can be instrumental in helping learners to engage with the full breadth and depth of the curriculum, and ensure that no student is left behind. In order for teachers in Turkey to use classroom assessments in these ways, they need more support than is currently available.

More guidance and examples are particularly important to help teachers check that students have understood and mastered content before moving on. Many students in Turkey reach high school without strong foundational competencies. National regulations have been very effective in reducing repetition in primary and lower secondary education, which is now far below the OECD average (OECD, 2016[12]). However, once these regulations are relaxed in high school, repetition increases sharply – with 7.7% of students in high school having repeated at least one grade, more than four times the OECD average (1.9%) (OECD, 2016[12]). While this is shaped by many factors, one is that teachers lack alternative strategies to support struggling students. In addition, until very recently schools in Turkey also provide students with limited study help outside of classroom instruction time in comparison with many other OECD countries (OECD, 2016[12]). New measures to provide more support include new support and catch-up classes introduced in 2018 and a Remedial Education Programme introduced in 2017 to support students from Grades 3 and 4 with major gaps in key literacy and numeracy competencies.

Another critical area is helping teachers develop and use assessments that support active learning and the full breadth of the curriculum. During interviews with the review team, teachers said that they need more support to develop and implement assessments where students are required to apply what they know to solve problems, rather than choosing the right answer among a set of predetermined options.

Box 6. Recommended actions for teachers' assessment resources

3.1.1. Help teachers to monitor learning in line with national standards by introducing assessment tools like diagnostic assessments, especially in the early grades of primary education. These assessments should be linked to the curriculum and have a clearly defined formative function to help teachers identify and support students at risk of falling behind. Schools with a high concentration of struggling and low performing students should receive additional resources and be encouraged to provide additional learning time out of regular classroom hours.

3.1.2. Provide teachers with tools to assess a wider range of competencies. Notably, Turkey might consider introducing a student portfolio, drawing on the lessons from the pilot currently underway. To help teachers use the portfolios effectively, the ministry can provide guidance on what kinds of work and tasks should be included, how teachers can discuss students' portfolio**s** with them, and from lower secondary onwards, how to use the portfolio to start discussing with students their future pathways. Other useful tools to be

developed include nationally validated assessment items and an assessment map to help teachers select the most appropriate methods or tasks for given learning outcomes.

3.1.3. Redesign the *EBA* portal to provide a broader range of better-quality resources. The ministry should take a lead role in redesigning the portal and ensuring the quality and relevance of the assessment resources provided. Resources to be provided via *EBA* as a priority include the diagnostic assessments and guidance on new student portfolios. Teachers should be closely involved in this work to ensure that the resources are useful. In the future, as assessment literacy grows, teachers would take on more of a leading role in developing and validating materials.

Policy issue 3.2. Using formative feedback and reporting to better support student learning

In Turkey, teachers make significant efforts to regularly assess students and provide them with summative numerical marks. However, the review team's interviews indicated that teachers do not regularly use assessment results to give formative feedback to students. High-quality classroom feedback can accelerate learning significantly, in particular among lower achieving students (Wiliam, 2010[13]). It is also important for fostering motivation and other essential "learning to learn" attitudes and skills.

In Turkey, teachers and schools regularly communicate student performance to parents and students via report cards, parent-teacher meetings and sophisticated online systems that provide real-time information on grades. However, reporting does not follow consistent national standards, which means that students and parents do not know if marks indicate that national expectations are being met or not. Another issue is that report cards and online systems do not allow for qualitative feedback, including what students need to do in order to further their learning. This kind of qualitative feedback about students' performance and progress is particularly important in grades where students do not receive numerical marks based on summative assessments, as in Grades 1 to 3 in Turkey (Nusche et al., 2011[14]).

Box 7. Recommended actions for formative feedback and reporting

3.2.1. Encourage more formative feedback in the classroom by providing teachers with visual demonstrations of good feedback through videos or written examples, and ideas of how they can tailor feedback to their classroom and school context. For example, in large secondary school classrooms, teachers might make greater use of peer assessment and ask students to record the feedback they receive from teachers and peers in their portfolios.

3.2.2. Use reporting to help parents and students better understand where they are in their learning and next steps by clearly defining levels of performance aligned to the national learning standards. Report cards should also provide space for qualitative reporting to help students and parents understand their strengths and areas for improvement.

Policy issue 3.3. Reinforcing in-service training on assessment

The challenges that teachers in Turkey face in being able to use assessment effectively to support learning suggests that they need many more quality learning opportunities on assessment. However, professional development in Turkey is limited both in scale and quality. Teachers participate in professional development far less than teachers in other OECD countries (OECD, 2016[12]). And participation in assessment-related professional development is especially low – between 2012 and 2016 less than 1% of teachers in Turkey attended courses and seminars on classroom assessment (MoNE, 2016[15]; MoNE, 2017[16]). The OECD review team's interviews with teachers suggest that low participation is due to the perceived low quality and relevance of courses, and to the fact that it is disruptive, with training tending to take place outside the school during classroom hours. Studies in Turkey confirm this view (Günes et al., 2011[17]). This review suggests how Turkey can significantly increase both the availability and the quality of professional development so that more teachers benefit from immediate support to improve their assessment practice.

Box 8. Recommended actions for teachers' in-service training on assessment

3.3.1. Make training on classroom assessment a top professional development priority. All teachers should be required to undertake training on assessment, with teacher appraisal used to identify development needs. At the same time, the quality and availability of training provided needs to be significantly improved and refocused towards more hands-on learning opportunities. Using online materials blended with face-to-face training has the potential to greatly expand provision in a way that is cost-efficient and inclusive, especially important given Turkey's large and geographically dispersed teaching population. Developing standards for professional development will be important to ensure quality across different providers and platforms.

3.3.2. Develop school-based professional learning on assessment. Schools will need external impetus and support to create collaborative learning activities. One way to do this is by designating experienced teachers as assessment leaders in schools and deploying the 81 new provincial assessment and evaluation centres established across the country to provide these leaders with training on how to direct group activities on important topics, like moderating student work. The ministry can further encourage school-level groups by requiring teachers to devote a certain proportion of their time to collaborative activities, as is increasingly the case in many OECD countries.

Policy issue 3.4. Improving teachers' initial preparation in classroom assessment

Good quality initial teacher preparation ensures that teachers start their career with a sound understanding of different assessment approaches and the confidence and skill to use them. It is also a powerful vehicle for education reform in Turkey because the expansion of the education system means that a significant number of new teachers will need to be recruited in the coming years. While initial teacher education programmes include a measurement and assessment course, national research shows that graduates of these programmes do not know how to use different types of assessment in their classrooms (Aksit, 2016[18]; Eren, 2010[19]).

Turkey's Council of Higher Education is now developing a new module on classroom assessment for initial teacher education programmes. At the same time, the MoNE's Teacher Strategy 2017-23 states that efforts will be made to provide teacher candidates with more practical learning opportunities. However, governance challenges make it difficult to ensure that initial teacher education provides sufficient coverage of classroom assessment. This is because the separate bodies responsible for tertiary education and initial teacher education programmes – the Council of Higher Education – and for teacher training, classroom assessment policies and the curriculum – the Ministry of National Education – do not necessarily work together.

Box 9. Recommended actions for teachers' initial preparation in assessment

3.4.1. Ensure sufficient coverage of classroom assessment in initial teacher preparation. First, gaps in the new teacher competencies on assessment – like the absence of specific expectations for beginning teachers' assessment knowledge and skills – will need to be addressed. Second, the revised assessment competency should be incorporated into accreditation requirements for initial teacher education programmes, and accreditation systemically implemented, which is not currently the case. Finally, Turkey should consider creating an advisory committee to address the governance challenges of initial teacher education.

3.4.2. Ensure that initial preparation in classroom assessment is practical and connected to the school curriculum. As well as ensuring that the new initial teacher education module on assessment and evaluation that the Council of Higher Education develops provides teachers with a strong foundation in assessment, the following should be considered:

- Reviewing the teaching practicum to ensure that it gives teachers multiple opportunities to put what they have learned about classroom assessment into practice and receive feedback.
- Through accreditation, requiring initial education programmes to model the assessment methods teachers are expected to use, to help develop teacher candidates' understanding of these methods.
- Building initial teacher education providers' expertise in student assessment and their understanding of the realities of Turkey's classrooms. For example, by encouraging university faculty and school staff to meet regularly and collaborate on assessment-related research projects, and through accreditation requirements that encourage initial teacher education providers to employ faculty who have studied evaluation and assessment at an advanced level.
- Including professional development on assessment in trainee teachers' induction programme.

Ensuring national examinations and assessments positively influence the learning of all students

Turkey's two central examinations are designed to place students in different upper secondary and tertiary programmes and institutions based on ability. However, the limited availability of quality learning options leads to a large number of students trying to access

a limited number of places in the most prestigious high schools and bachelor's degree programmes. The acute pressure on high school and tertiary places results in teachers and students devoting considerable time to preparing for the central examinations rather than the competencies like effective communication, critical thinking and problem solving that are central to Turkey's curriculum and the country's development as a modern knowledge economy.

In recent years, and most recently during the course of this review, Turkey reformed its examinations with the aim of reducing some of their distorting consequences for teaching and learning. This review provides recommendations to support those reforms, by suggesting how the examinations' design and questions can be further improved so that selection into upper secondary and tertiary education is as objective and fair as possible in the current context and has a more positive influence on student learning. It also suggests options to better align examinations with national goals for universal completion of upper secondary, through the introduction of an examination that helps certify student learning at the end of compulsory education.

Ultimately, however, reducing the pressure and distortions created by the examinations will require reducing the stakes associated with selection in Grades 8 and 12. This means creating more flexibility for students to move between high schools and tertiary pathways. It also means addressing the deep disparities in the quality of different high school types and tertiary programmes. Here, an important measure will be fully developing the national assessment, *ABİDE*, in addition to the initiatives on Student Learning Achievement Monitoring, Turkish Language Skills and Common Examinations, to provide reliable information on learning at the system, school and student levels to support more equal standards.

Policy issue 4.1. Enhancing the school placement and selection process at the end of Grade 8

Reform of the examination and student placement system at the end of Grade 8 is closely related to the current high school offer in Turkey, and the challenge the country is facing in managing the transition from an elite to a universal system of upper secondary education. Turkey has an established body of prestigious high schools where entry is determined by examination results. The wide variations in student learning experience and outcomes across these schools mean that placement at the end of Grade 8 carries very high stakes.

Over the past 15 years, Turkey has implemented a series of reforms to try to reduce these variations, complemented by successive changes to the placement mechanism at the end of Grade 8. In 2013, the compulsory Transition from Elementary Schools to Secondary Schools Examination (TEOG) was introduced to determine the placement of students across all high schools. The system had the merits of being transparent and objective. However, by making entry to all high schools dependent on examination results, the TEOG also exerted a powerful and negative backwash effect on education. Under the new system introduced in 2018, students will select their preferred high schools within their local area, with criteria to manage oversubscription. Placement in the most prestigious schools and programmes (approximately 10% of all high school places) will continue to be determined by student performance on a centralised examination.

These changes bring Turkey closer to the practices of other OECD countries, where systems that offer different upper secondary programmes draw on a wide range evidence to determine student placement, in particular, student preferences and school-based assessments, and avoid relying heavily on the results of national examinations alone.

However, while the intention of the current reform is positive – in terms of reducing the pressure on students and basing transition decisions on student interests and performance in school rather than a one-off examination score – the policy was decided quickly, with little time for analysis and preparation. This is likely to create challenges in the first years of implementation, not least oversubscription at the schools perceived to be the best. In addition, while only 10% of school places will now be determined by the Grade 8 examination, at the time that OECD review was drafted the ministry predicted that the vast majority of students – 1 million, out of a cohort of 1.2 million – will take the examination, meaning that it will continue to exert significant influence on the education system. This makes it important that Turkey consider measures to mitigate negative impacts on equity, and teaching and learning.

This review provides recommendations on how these challenges might be addressed in the immediate term. It suggests that the likely mismatch in supply and demand for certain schools make it critical that the criteria used to place students when their preferences are oversubscribed are transparent. Over the medium term, developing a fairer and more effective placement system will also require providing more and better-quality information to students and their parents about the pathways that are likely to match their interests and abilities, and creating more flexibility across pathways and into tertiary education.

Box 10. Recommended actions for the selection process at the end of Grade 8

4.1.1. Consider the system for high school placement to manage demand, including clear criteria on how places will be determined when there is oversubscription. Current proposals to balance classroom marks with objective and transparent factors like student age and having a sibling in a school seem positive, as do proposals to categorise classroom marks broadly (e.g. A, B, C, etc.) to avoid undue pressure on individual scores.

4.1.2. Provide more information to guide student choice, while improving flexibility between pathways. Under the new placement system, students will need more information and guidance when choosing their high school. This might be provided by:

- Developing further the pilot student portfolio to help students reflect on their interests and abilities across a range of domains.
- Providing schools with more support on how to discuss future pathways with students and parents, including by building a cadre of trained school counsellors, encouraging visits to local schools and dedicating some school time to careers guidance.
- Making available information on a wider range of high school outcomes like labour market outcomes and the kinds of competencies that employers look for.

Greater flexibility across upper secondary programmes, for example by giving high schools more discretion and encouragement to accept students from different programmes up until the end of Grade 10, will help to reduce the stakes of initial selection. In the medium to longer term, stakes can also be reduced by structural changes like providing provincial education directorates with autonomy, increasing the number of comprehensive high schools and encouraging the graduates of technical and vocational high schools to pursue higher education degrees.

4.1.3. Reduce negative distortions created by the high school entrance examination. Ensure a better match between what is assessed and the curriculum's learning goals by introducing more examination items that require students to perform complex tasks in authentic contexts. Given the large number of students expected to sit the examination and the few school places available, efforts to improve its discriminatory capacity will be important. Pre-tested sample items can be used for this purpose. Results analysis can be used to improve the examination's discriminatory power over time. Since selective schools tend to enrol students from the most advantaged socio-economic groups, Turkey should consider measures to ensure that students from disadvantaged backgrounds have a fair chance of getting a place.

Policy issue 4.2. Ensuring that examinations at the end of compulsory education serve effectively the functions of certification and selection

While Turkey has a school-leaving diploma for students who complete upper secondary education, this does not effectively serve a qualification and certification function. The diploma is based solely on classroom assessment marks without any standardised measure of achievement. In contrast, the majority of OECD (21) countries have an examination that provides all students with the opportunity to certify their achievements and demonstrate that they have met the minimum requirements of compulsory schooling (OECD, 2015[9]).

Another concern for the university placement examinations in Turkey is that while they serve their primary administrative function of placing students in higher education programmes well, they dominate teaching and learning throughout high school. Students, parents and teachers devote significant time and energy to preparing for examinations. These examinations have been evolving to give more focus to the higher-order competencies that are important for tertiary success, but remain reliant on multiple-choice tasks. Although school marks are included in the university placement examination, providing scope for a range of different assessments that can cover more of the curriculum, in practice the classroom assessments in high school duplicate the narrow assessment tasks of the central examination. Using classroom marks from Grades 9-12 also puts pressure on students from their first term of high school while they are still adjusting to a new phase of their schooling. This review suggests ways in which the university placement examination could be redesigned so that it has a less negative backwash effect on student learning.

Box 11. Recommended actions for the examinations at the end of compulsory education

4.2.1. Develop a national examination to help certify achievement at the end of compulsory education. The examination can build on the existing two-stage university placement examination with the Basic Proficiency Test – *Temel Yeterlilik Testi* (TYT) developed to serve a certification function and remain the first filter for university placement, and the Field Qualification Test – *Alan Yeterlilik Testleri* (AYT) continuing to be the final selection and placement tool for tertiary education. To better cover the breadth of the curriculum, some open questions and a small share of teacher-assessed work could be included. In the future, Turkey might move towards a single, dual-purpose examination like most other OECD countries, although this is technically challenging given the need to ensure reliability across the full ability range.

4.2.2. Enhance the validity of the university placement examination. Similar to the Grade 8 examination, using optical character recognition technology for scoring the examination would mean that a greater variety of item types capable of automatic scoring could be introduced. The grades that contribute to the university placement score might be reduced to Grades 11 and 12 to give students more time to adjust to their new school and create more space for formative assessment. While the university placement is transparent and largely objective – both essential given high demand for places – as access expands, a wider range of sources might be included to better reflect student aptitude and motivation for different tertiary programmes, like interviews, applicants' work experience, volunteer work, recommendations and a written statement from the applicant.

4.2.3. Improve the reliability and validity of school-based assessments. The ministry should provide more detailed instructions to teachers and schools on how and what they should be assessing for school-based work that contributes to central examination results. Steps are also needed to ensure greater reliability in the school-based marks, for example through the provision of scoring criteria and greater use of moderation techniques. In the first instance, the new assessment centres in the provincial directorates might perform external or statistical moderation of schools; as teachers' assessment capacity improves, school-level groups for moderation can take on a greater role.

Policy issue 4.3. Developing and making available better-quality data on national learning outcomes

Creating a fair high school placement system that does not distort teaching and learning will ultimately mean reducing the stakes associated with placement by ensuring that all students can attend a good school. A crucial step in improving school quality will be making available more and better-quality information on the learning outcomes of Turkish students. This is important for effective policies at the system level, and for improving practices in classrooms and schools.

Policy makers and schools in Turkey have very little national data that can be used for these purposes. In an understandable desire to avoid exacerbating the highly competitive atmosphere that surrounds examinations, the ministry restricts the examination data made available to schools. School principals can see the results of their own students but not those of other schools. This means that they cannot evaluate their own performance with precision nor can they make meaningful comparisons. As a consequence, most schools focus on their examination scores as an indicator of quality. But since students' examination performance is influenced by a range of factors beyond a schools' control this is unlikely to be an accurate indicator of quality. Providing teachers and schools with more comprehensive and contextualised feedback on examinations would help them to better understand how they are doing and what they can do to improve.

Providing schools with more data on examination results will still leave gaps in the availability of reliable information to monitor learning. Turkey currently uses classroom assessments marks from Grades 5 and above for school evaluation and system monitoring purposes, but these marks are highly variable in all countries and especially in Turkey where teachers report difficulties in determining students' levels of learning in line with national expectations. New assessment initiatives such as ABIDE and other instruments introduced more recently, have the potential to provide schools, provincial and central offices of Ministry of National Education with more reliable data to monitor students' learning progress across the school cycle.

Across the OECD, the vast majority of countries (30) have national assessments to provide reliable data on student learning outcomes that is comparative across different groups of students and over time. When accompanied by background questionnaires, such assessments also provide insights into the factors that are influencing learning nationally and across specific groups. Turkey's recently introduced assessments, such as ABIDE, have the potential to play this role.

Box 12. Recommended actions for data on learning outcomes

4.3.1. Provide schools with meaningful examination data to improve teaching and learning. Making a more secondary analysis of the large amount of valuable data that the university placement examinations yields would help schools better understand the factors impacting the learning outcomes of their students. The ministry and ÖSYM should provide schools with accessible examination data so that they can understand how their school's results compare regionally, nationally and with similar schools. Providing teachers and schools with analytical reports with test score distributions and student response statistics for all items will enable them to adjust their approach to teaching problematic topics in the future.

4.3.2. Implement *ABİDE* as a fully developed national assessment in primary and lower secondary education to address a major gap in national data. As the first step, Turkey should create a high-level representative steering committee to provide guidance to the Directorate of Measurement, Evaluation and Examinations as it develops Turkey's new national assessments. The committee would help to raise the status of the assessments nationally and promote the use of their results. This review recommends that this should include delivering reliable information on system performance for policymaking and for evaluating progress towards national education goals. It also recommends that *ABİDE* is used to provide formative information to teachers and schools to enhance learning. In order to do this, the assessment will need to be implemented as a full cohort assessment that provides data on every child in at least primary or secondary education. Once the purpose is determined this will also guide other decisions like how frequently the assessments are conducted, and the subject areas that are assessed.

Using the evaluation system to promote better assessment and learning

The wider system for evaluation – teacher appraisal, school evaluation and system evaluation – can significantly influence teaching and learning practices (OECD, 2013[8]). When the wider evaluation system is well-designed and well-aligned with national goals, it provides powerful levers for transforming the instructional system and promoting the use of high-quality assessment practices that support higher-order learning outcomes.

Turkey already has established processes for evaluating teachers and schools. It also uses strategic planning to set and monitor education goals. However, two factors prevent these processes from supporting improvement in teaching and assessment effectively. One is the heavy reliance on summative test results to evaluate quality. This raises concerns with respect to the fairness and reliability of evaluation judgements and reinforces teachers', schools' and society's perception that high test scores, rather than the curriculum's broader learning goals, matter. This review suggests how appraisal and school evaluation can be developed to focus more centrally on the progress that students make in their learning, as a

more meaningful measure of instructional quality. Developing a regular national assessment will also help to ensure that when outcomes data is used to inform evaluation, including for system monitoring, the inferences are fair, reliable and reflect the curriculum's learning goals.

Second is the extent to which teacher appraisal, school and system evaluation remain focused primarily on compliance and provide limited feedback and encouragement to teachers and schools on what they can do to improve the quality of learning and assessment practices. A stronger focus on the quality of teachers' assessment practices and on school-wide policies that encourage teachers to continually develop their assessment skills would ensure that evaluation is used more effectively to support improvements in teaching and learning. More analysis from the ministry and guidance from provincial directorates would also enable schools to better understand the factors currently preventing many students from making good progress and identify strategies in response.

Policy issue 5.1. Using appraisal to encourage and support teachers to employ good assessment practices

By assessing teachers and providing feedback on their performance, appraisal can have a significant impact on teaching, learning and assessment practices. Turkey has systems for probation and regular appraisal, however the review team's interviews with teachers and national research on teachers' assessment competencies (Kan, 2017[10]) suggest that appraisal is not currently serving as a lever to develop and modernise teaching. Appraisal for probation, although recently introduced, also does not seem to be ensuring that all new teachers enter the profession with the necessary teaching skills, including for assessment.

One reason for this is a lack of alignment between the education system's objectives for learning, teacher competencies and appraisal criteria. While Turkey published revised teacher competencies in 2017 that are more streamlined and operational than the previous version, links with the curriculum's expectations for learning and teacher appraisal remain underdeveloped. At present, the teacher competencies and criteria for appraisal seem to exist separately and both miss key aspects of teachers' competencies for using assessment. Appraisal criteria also focus on how frequently teachers display individual assessment practices, encouraging teachers and evaluators to concentrate on discrete activities in a compliance-oriented exercise, rather than considering the quality of assessment practices or how they interact to support student learning.

Another reason is that while both types of appraisal include classroom observation, the OECD review team's interviews suggest that principals do not have a good understanding of the importance of their role in undertaking classroom observations or of how it should be performed, limiting its contribution to the improvement of teachers' assessment practices. At the same time, the use of other sources of evidence like student marks from classroom assessment and examinations should be reconsidered, since they may not provide a useful reflection of the quality of teachers' assessment or teaching practices overall. A final reason is that appraisal is not providing teachers with helpful feedback or links to professional development to develop their assessment competency.

Box 13. Recommended actions for teacher appraisal

5.1.1. Ensure that teacher appraisal reflects the breadth and depth of assessment competency important for learning. First and critically, Turkey should ensure that the new teacher competencies published in 2017 are aligned with the curriculum and the new learning standards that this review recommends (see Recommended action 2.2.2). Once revised, the teaching competencies should guide the development of new guidelines and criteria for teacher appraisal. The latter should address gaps in the current appraisal criteria like teachers' skills in developing their own assessments and providing student feedback. Introducing levels of teaching proficiency as part of appraisal (e.g. insufficient, basic, proficient and distinguished) would help to focus on the quality of teachers' assessment practices, rather than how frequently they demonstrate prescribed practices, as is currently the case. Finally, as part of national plans to introduce a new performance-based career path, Turkey should set out how assessment competency is expected to progressively develop in order for teachers to reach higher stages of the teaching career path.

5.1.2. Ensure that evaluators focus on authentic measures of teachers' assessment practice during appraisal by:

- Developing national rubrics for classroom observations that guide evaluators to focus on a few indicators for assessment where there are known gaps in Turkey like the use of different types of assessment and regular checks for student understanding.
- Providing schools with guidance on what to include in e-portfolios like marked examples of student work and lesson plans.
- Encouraging teachers to informally ask students for feedback at the end of lessons and using the results formatively for future lesson planning.

5.1.3. Use appraisal results to develop teachers' assessment competency by providing evaluators with pointers on how to provide descriptive feedback for teachers on their strengths and learning needs. To ensure that the intention to introduce professional development plans for teachers leads to a meaningful exercise, Turkey should provide training and significant guidance to principals on how to work with teachers to identify their professional development goals and identify specific objectives that are directly related to classroom practice.

Policy issue 5.2. Revising school evaluation to support learning and effective assessment practices

The framework for external school evaluation – called school inspection in Turkey – focuses on test scores from classroom assessments and examinations. These cover a narrow range of learning goals, compared to the broad competencies emphasised by the curriculum and provide a summative judgement that does not capture progress in learning, which is an essential aspect of school quality. The process indicators on assessment practice in the framework also focus predominantly on ensuring compliance with requirements to undertake summative assessments, rather than ensuring that assessments is used in a way that supports learning.

The frameworks for school self-evaluation also focus on reporting against national requirements for undertaking assessment, rather than encouraging schools to engage in a

broader, deeper, collective discussion about what is working well and where improvement is required. Turkey also has multiple self-evaluation systems for different types of schools, which creates duplicates for some schools and means that self-evaluation does not ensure that all schools are working towards common national goals. At present, while some of the self-evaluation systems do pay attention to how assessment is used to support learning, which is positive, they do not encourage schools to review key aspects of the quality of their assessment practices like the use of different types of assessment and the quality of student feedback. A final issue impeding schools from using self-evaluation for improvement is that the centralised framework for self-evaluation leaves schools with no scope to adapt the self-evaluation framework so that it reflects their own context and priorities.

Box 14. Recommended actions for school evaluation

5.2.1. Align the new school inspection framework with national objectives for learning and assessment. The new system of school inspection should address important gaps in the current framework by including indicators on:

- Learning against national standards and the progress that students make at the school.
- The quality of school-wide assessment practices like the use of formative assessment and support for teachers to use a broad range of assessments.
- School policies to support improved use of assessment like providing professional learning on assessment.

To make the new inspection framework a more practical tool for improvement, examples of effective practice could be included. This would help schools understand what they should be working towards, and encourage greater consistency across evaluators. Inspection reports should also include detailed feedback and a "to-do list" of actions.

5.2.2. Use self-evaluation to focus schools on developing their assessment capacity. The different systems for self-evaluation should be revised to create a single framework based on the same core indicators as the inspection framework. Providing schools with the space to add to the core indicators will enable them to adapt self-evaluation to their own context and priorities.

To encourage schools to use self-evaluation more for critical inquiry, the new framework for self-evaluation might also include "challenge" questions, like how well the school supports all students to make good progress and what can be improved. Inspectors should also review school's self-evaluation practices to look for evidence that it is being used to set specific goals for improvement.

Policy issue 5.3. Using system evaluation to help improve teaching, learning and assessment practices

System evaluation draws on information from across the education system to monitor progress against national goals and identify where improvements can be made. Countries use a combination of qualitative and quantitative information about what is happening across their education systems for this purpose, such as data on students, teachers and

schools, and information on school quality and student achievement. Over the past decade, Turkey has focused on expanding the information that is collected and reported. The MoNE's Information System (MEBBIS) now provides extensive data on school inputs and conditions, and the e-School Management Information System enables continuous monitoring of children's school attendance to help reduce drop-out (UNICEF, 2012[6]).

The focus for system evaluation should now shift towards making greater use of the information that is collected to drive improvement in the quality of schooling and student outcomes. This will require greater analysis of information to see what it reveals in terms of the teaching and learning challenges in Turkey's classrooms and using these insights to direct support back to schools.

One remaining but critical gap for system evaluation also needs to be addressed. In the absence of other data sources, the current strategic plan uses students' end of year marks from classroom assessments averaged across all subjects and all students in Grades 5 to 12 to monitor learning and sets a goal to increase the average for each grade to 80 out of 100 by 2021 (MoNE, 2015[20]). While this gives national prominence to the importance of student outcomes and what happens in the classroom, classroom test scores are not a reliable indicator of learning.

Box 15. Recommended actions for system evaluation

5.3.1. Ensure that education targets and public information about schools reflect national priorities. Creating prominent national goals for learning (rather than high test marks) will help to galvanise change by focusing education actors and society on what matters for teaching and learning. Targets should focus on demonstrating progress against the curriculum's learning standards and use assessment data that is valid and reliable such as:

- Long-term goals like reducing the share of 15-year-olds who do not develop basic competencies (i.e. below Level 2 in the PISA framework) by 2030.
- Medium term goals like increasing the share of students in primary and lower secondary education who meet national standards over the duration of the next strategic plan using data from ABİDE.

Students and parents will need more qualitative information about schools to help them to identify which high schools are best suited to their needs. Turkey might make school inspection reports and summaries of self-evaluation reports available to prospective students and their parents, and ensure that information of particular interest for parents and students – like how the school supports students to make good progress – is easily accessible.

5.3.2. Help schools use evaluation information for improvement. The ministry can undertake much more analysis of assessment data and information from school evaluations to identify school-level factors impacting performance. This information can inform national planning and policies, and be shared with provinces to help them better understand the challenges that schools face.

School principals also have a central role to play in making greater use of evaluation information to identify their school's development needs. However, this will require

principals to take on greater leadership of assessment and pedagogy more generally. As principals are developing their roles as pedagogical leaders in Turkey, sharing assessment roles across the school will mean that they can draw on the knowledge and skills of experienced teachers. Provinces can also encourage school improvement by publicly recognising schools that develop effective and innovative processes to improve teaching and learning, and providing ways for these schools to share their strategies with others.

Notes

[1] Following the completion of the analysis for this review, the OECD was informed that a new item development approach had been adopted for the high school and university placement exams. This approach reinforces previous steps taken to situate questions in real-life contexts and assess higher order thinking skills. The Ministry of National Education is publishing each month sample questions to help students familiarise themselves with this new style of assessment.

[2] The Student Learning Achievement Monitoring assessment was introduced under the Ministry of National Education's 2023 Education Vision. It is intended to provide schools with diagnostic information on students' strengths and weaknesses in Turkish, mathematics and science. As of mid-2019, some 300.000 students in grades 4, 7 and 10 have participated in the assessment. The Turkish Language Skills Study assesses the competencies of students in four areas: listening, reading, writing and speaking. It has so far been conducted in 15 provinces prior to the nationwide placement exams, providing students with feedback on their Turkish language proficiency and suggestions on areas where they need to improve. The Common Examinations initiative refers to newly introduced joint examinations conducted at the provincial level. The purpose is to provide large-scale, comparable data on student performance as well as information for students themselves to better understand their proficiency gaps. The Ministry of National Education expects that the results obtained from these initiatives will be examined at the school level and used to inform the design of weekend courses to help students address areas of weakness. These initiatives were introduced after the analysis for this review was completed and are therefore not addressed in this report.

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Chapter 1. The Turkish education system

This chapter provides an overview of the Turkish education system. It sets out the key aspects of governance, financing of education, school structure, teacher and school leader policy and the curriculum, that are relevant to student assessment. It reviews main trends in education, highlighting the significant progress that has been made in recent decades to expand participation and raise learning outcomes. It also highlights where further progress is needed to meet national goals and address inequalities.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

Turkey is one of the few countries that has managed to improve student achievement while increasing access to education. Over the past decade, significant investment and reform to Turkey's education system have enabled a major expansion in participation. The country is aware that its core challenge now is to raise the quality of schooling in order to improve student learning outcomes and reduce the large disparities in performance between regions and across different types of schools. It was with a view to identifying how student assessment can be used more effectively to improve learning outcomes that Turkey commissioned this review. This first chapter provides an overview of schooling in Turkey, how it is structured and policies that affect its operation, as well as a special focus on recent trends in participation, outcomes and equity.

The role of education in Turkey's development

Education has been central to Turkey's emergence as a unified republic. Education is increasingly at the heart of the national economic agenda, aimed at achieving convergence with OECD levels of income and productivity. Over the past decade, Turkey's strong economic growth has enabled a sharp reduction in absolute poverty, with the share of people living below the national poverty line dropping from 28.8% in 2003 to 1.6% in 2014 (OECD, 2016[1]). However, relative poverty and income inequality are still among the highest within the OECD. The share of youth not in employment, education or training (NEET) while falling, is more than double the OECD average and almost three times higher for women (see Table 1.1).

Table 1.1. Education and development in Turkey

Key indicators	Turkey	OECD Average
GDP per head, USD, constant prices, constant PPPs, 2016[1]	23 469	38 096
GDP, volume – annual growth rates (%), 2016[1]	3.2	2.3
Gini coefficient of household disposable income in 2014 (or nearest year)[2]	0.4	0.3
Population growth (annual %), 2016[3]	1.57	0.67
Rural population (percentage of total population), 2016[3]	26	20
Unemployment rate, aged 15-24, all persons (%)[1]	19	17
Unemployment rate, aged 15 and above, all persons (%), 2016[1]	10.8	7.4
Percentage of 18-24 year-olds, NEET (unemployed or inactive) 2016[1]	33	15
Percentage of 18-24 year-olds, NEET (unemployed or inactive) women, 2016[1]	46	16
Human Development Index (HDI), 2015[4]	0.77	0.89
Share of population with less than upper secondary education, aged 25-34, 2016[1]	45	16
Percentage of adults attaining Level 1 or below in literacy (2016)[5]	45.7	18.9
Percentage of attaining Level 1 or below in numeracy (2016)[5]	50.2	22.7

GDP: Gross domestic product.
NEET: Not in education, employment or training.
PPP: Purchasing power parity.
Sources: 1. OECD (2018[2]), *OECD Statistics*, https://stats.oecd.org/ (accessed on 20 February 2018).;
2. OECD (2016[3]), *Society at a Glance*, http://dx.doi.org/10.1787/9789264261488-en; 3. World Bank (2016[4]), *World Bank Open Data (Database)*, https://data.worldbank.org/ (accessed on 20 February 2018);
4. UNDP (2015[5]), *Human Development Data (1990-2015)*, http://hdr.undp.org/en/data (accessed 19 February 2018); 5. OECD (2016[6]), *Skills Matter: Further Results from the Survey of Adult Skills*, http://dx.doi.org/10.1787/9789264258051-en.

Turkey's Tenth Development Plan (2014-18) highlights improving skills as one of three overarching objectives, placing particular emphasis on the need to better align the education system with the needs of the labour market. Towards this end, and important for this report, is the emphasis given to developing a curriculum that is less exam-oriented, a transition system that is based on the interests and skills of students and a standards-based evaluation framework that focuses centrally on student learning (Ministry of Development, 2014[7]).

Key features of the education system in Turkey

Governance

Turkey has a strong system of education planning and is increasingly focused on the quality of school outcomes

Since 2010, the Ministry of National Education (MoNE) has developed five-year strategic plans for the education sector. These plans provide medium-term objectives monitored by quantitative indicators and set out how the ministry will work to achieve them. They also provide the basis for planning at provincial, district and school levels (MoNE, 2017[8]). With the introduction of strategic plans, the Turkish education system's initial sustained emphasis on expanding access has given way to a sharper focus on the quality of school outcomes. This is reflected in the 2015-19 Strategic Plan, which includes important measures intended to improve instructional practices including assessment practices and to build the ministry's capacity to monitor and evaluate education quality (Box 1.1). At the same time, the Ministry of National Education Information System (MEBBIS) provides extensive data on school inputs and conditions. The creation of various electronic platforms has also made information more widely accessible to teachers, schools and parents.

The Ministry of National Education is responsible for all school-level policy

Turkey has one of the most centralised education systems among OECD countries (OECD, 2017[9]). The ministry determines and oversees the implementation of all policy in primary and secondary education, with another central body, the Council of Higher Education, deciding policy at the tertiary level (Figure 1.1). Curriculum development, textbook approval and the framework for assessment practices are all determined centrally. The ministry likewise decides the allocation of human and financial resources to schools via its Provincial Directorates. Through its inspectors in the provincial directorates, the ministry is also responsible for external teacher appraisal and school inspection, though inspectors' functions were under revision at the time of the OECD review. Among European countries, only in Greece and Luxembourg does the central government concentrate a similar degree of decision-making authority, and their school systems are markedly smaller than Turkey's. With close to 54 000 public and private schools, 1 million teachers and over 16 million students spread across a territory twice the size of Germany, Turkey has by far the largest school system in Europe.

Such a high degree of centralisation has resulted in a very large national administration (see Figure 1.1), where co-ordination across directorates is a recognised challenge (Celik and Gür, 2013[10]). Turkey has signalled its intention to decentralise education governance in successive action plans, with the goal of bringing government support closer to schools. So far reform has mainly taken the form of moving or "deconcentrating" authority to the

ministry's provincial directorates, rather than the delegation of more responsibilities to local governments or schools (Bayraktar and Massicard, 2012[11]).

Box 1.1. Measures of student achievement in the Strategic Plan 2015-19

The current Strategic Plan focuses on three priorities: access, quality and institutional capacity. Each priority is measured by quantitative performance indicators and includes targets to be achieved by 2019. The plan also sets out the activities that will be undertaken in support of its priorities and targets:

Priority 1: Access to education – focused on increasing enrolment and reducing early school leaving. This includes efforts to improve the fairness of the transition from lower to upper secondary high schools for students, with an indicator measuring the share of students who gain access to one of their first choices of high school.

Priority 2: Quality in education and training – focused on improving student achievement and student well-being. This includes reducing student repetition in upper secondary education and raising student achievement, with a target to increase the average year-end marks in classroom assessments in all subjects for students in Grades 5 to 12 to 80% by 2019. In 2014, the highest average year-end marks ranged from (60%) in Grade 9 to 78% in Grade 12.

Priority 3: Improving institutional capacity – focused on improving human, financial, physical infrastructure and technology to strengthen institutional capacity to support improvements in education systems. This includes targets to reduce the number of students per teacher to 15 by 2019 and increase the qualifications and professional development of ministry staff.

Source: MoNE (2015[12]), *National Strategic Plan 2015-2019*, Ministry of National Education, Ankara.

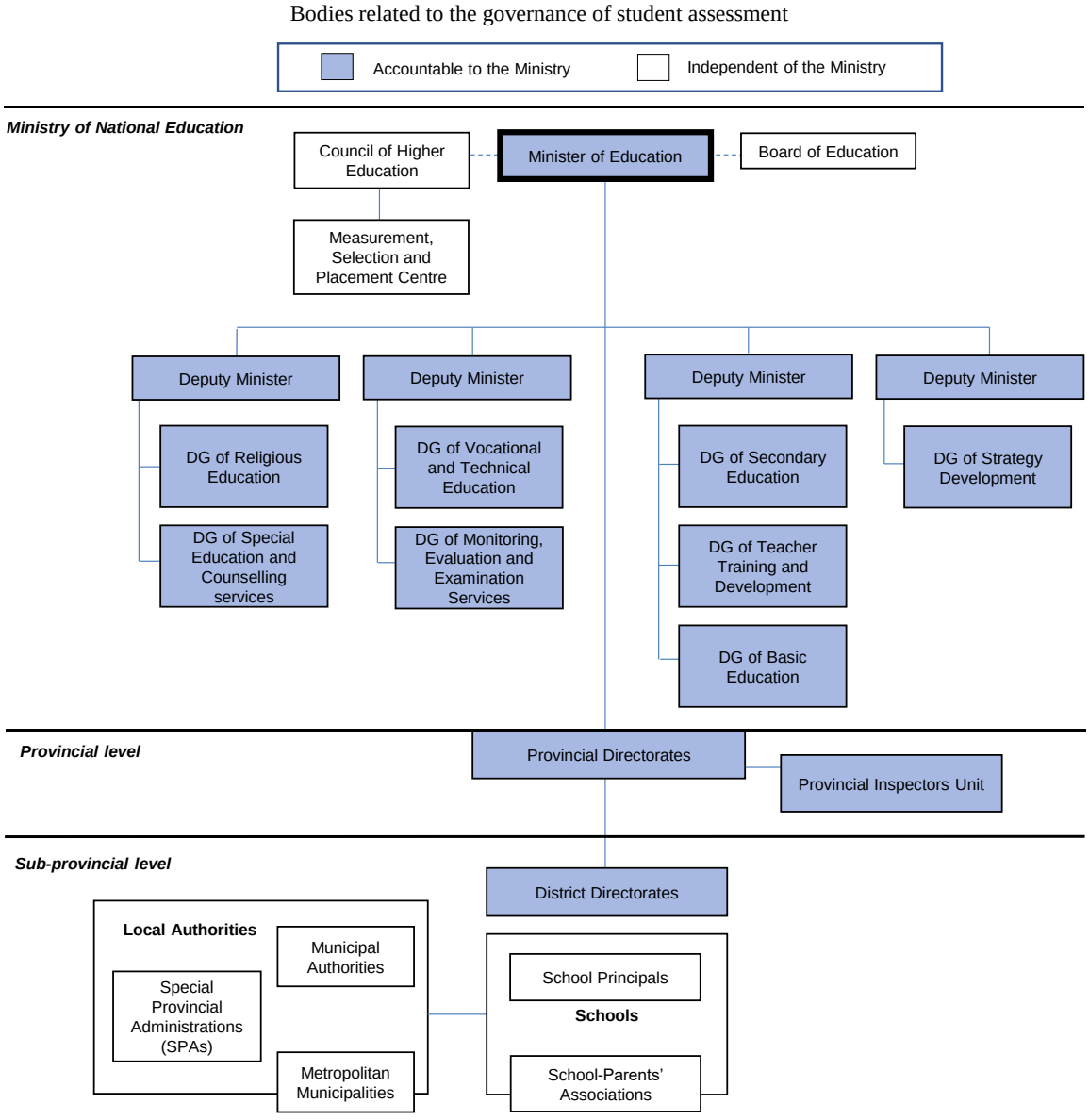
Provincial and District Education Directorates are responsible for implementing national policy

The MoNE manages the school system through 81 Provincial Directorates and 921 Districts Directorates across the country (see Figure 1.1). Personnel in the directorates are directly appointed and managed by the ministry or by the provincial directorate itself, except for the Provincial and District Education Directors, who are supervised by Provincial and District Governors under the Ministry of Interior Affairs. Provincial education directorates use the ministry's national strategic plan to develop their own annual strategic plans and set targets for their schools. Provincial responsibilities include monitoring schools' compliance with education policies, appointing teachers to schools on the basis of national allocations, providing in-service training to school staff and monitoring schools' progress in implementing their development plans (OECD, 2013[13]). District Directorates are responsible for executing the provincial directorate's directions and delivering support to local schools.

The ministry is trying to develop the capacity of provincial directorates so that they can manage their school networks more effectively and assume a more proactive role in school improvement. For example, to develop the capacity for evidence-based planning and monitoring, the ministry plans to introduce provincial assessment and evaluation centres. At the time of the OECD review, centres had been established in 26 provinces across the

country, and by mid-2019 this number had increased to 81. Operating under the guidance of the General Directorate of Measurement, Evaluation and Examination Services (MEES), the centres are affiliated to the Provincial Education Directorates with the goal of helping the latter make fuller use of assessment and examination data to monitor school performance. The centres also help provide assessment guidance to schools and in-service training to teachers. This is an important initiative, which, if adequately resourced, has the potential to benefit all provinces.

Figure 1.1. Student Assessment Governance in Turkey



Note: This figure does not provide a comprehensive vision of education governance in Turkey, rather it provides a snapshot of the government units and sub-units related to student assessment. Please check the MoNE Organisational Chart (hyperlink below) for a full overview of the MoNE and its sub-units.
Source: Authors based on MoNE (2017[8]), *Country Background Report - Turkey*, Ministry of National Education, Ankara; and MoNE (n.d.[14]), *Organisation Chart [Teşkilat Şeması]*, http://www.meb.gov.tr/meb/teskilat.php (accessed 18 January 2019).

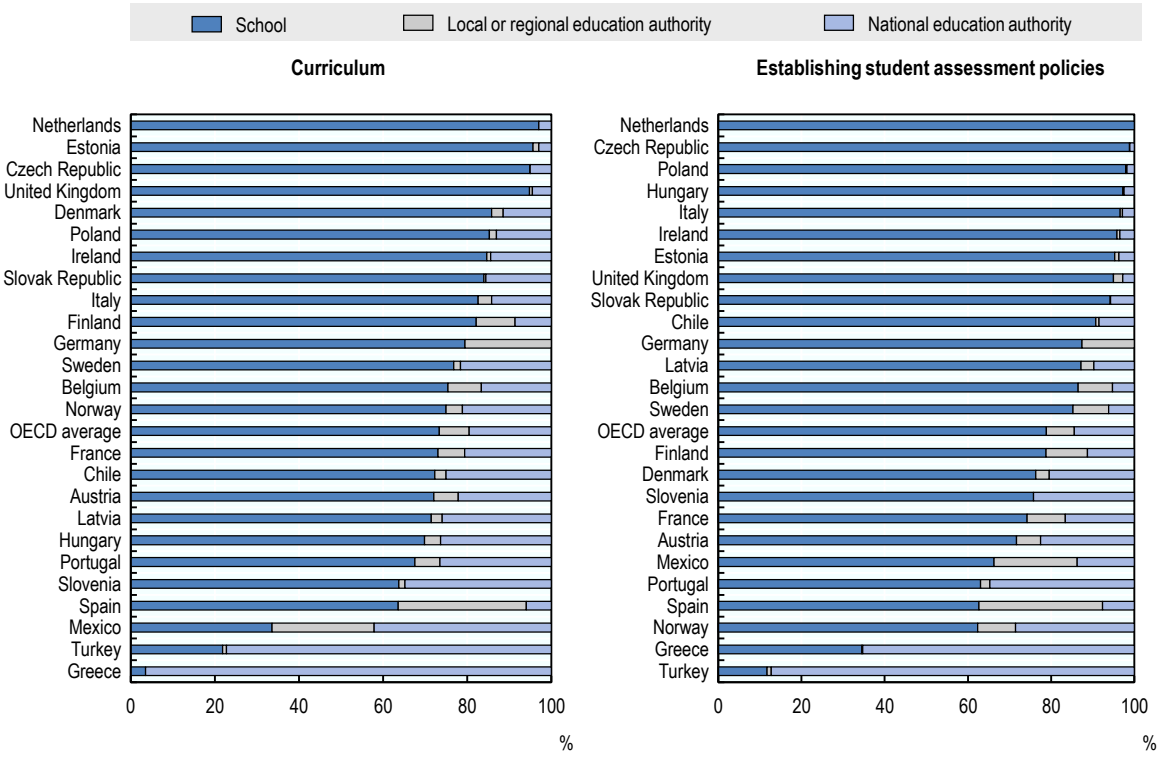
Schools in Turkey report that they have little autonomy

Schools in Turkey report among the lowest levels of autonomy in determining curriculum and assessment policies among countries participating in the OECD Programme for International Student Assessment (PISA) (Figure 1.2). One possible explanation is that school actors underestimate the level of flexibility they have in defining teaching and learning practices. For example, while national regulations define the number of classroom assessments and their formats, the regulations leave considerable flexibility for teachers to define the content and write the items (see Chapter 4).

Schools have less autonomy for managing human and financial resources than in most other OECD countries (OECD, 2016[15]). For example, schools have limited flexibility in how they use public funds and few responsibilities in teacher selection and career management. However, schools can use the funds raised locally by their school-parent associations, mainly from parents and local businesses, to support their own priorities and initiatives (World Bank, 2013[16]).

Figure 1.2. Share of responsibility for school governance held by schools, local authorities and national authorities

Results based on school principals' reports in PISA 2015



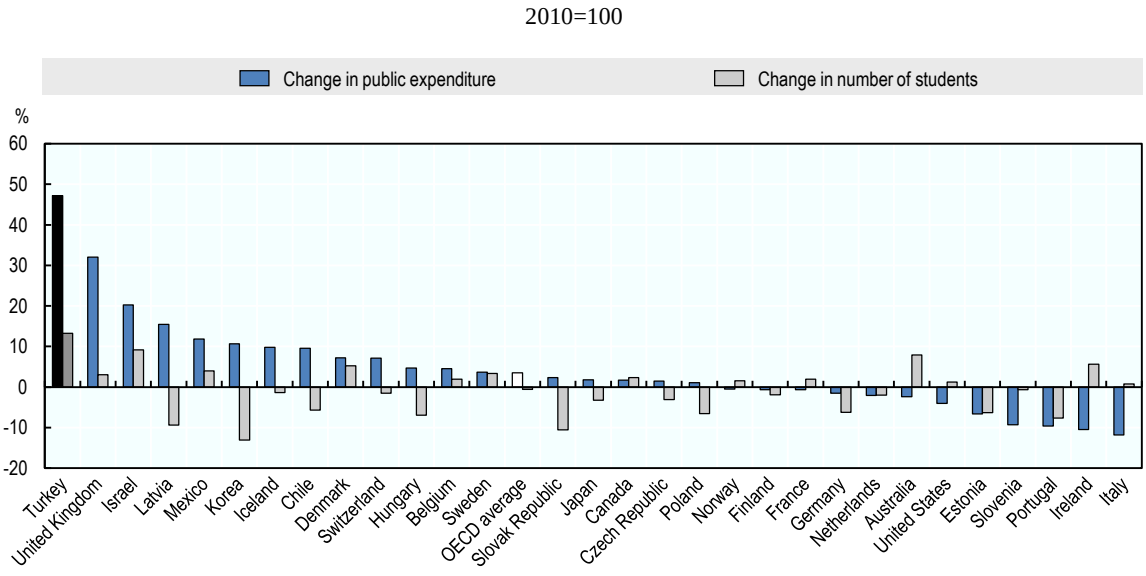
Note: Countries are ranked in descending order of share of responsibility held at the school level. School level responsibility is defined as the sum of responsibility of teachers, school principals and the school board in PISA 2015, Table II.4.2; figures include a selection of OECD countries.
Source: OECD (2016[17]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, http://dx.doi.org/10.1787/9789264267510-en.

Financing

Public expenditure has increased rapidly over the past decade

Since 2010, Turkey has significantly increased public expenditure on school education (Figure 1.3). Expenditure per student in primary, secondary and post-secondary non-tertiary education increased by 30% between 2010 and 2014, by far the largest increase among OECD countries (OECD, 2017[9]). This increase was driven in large part by the need to expand the number of classrooms and schools to accommodate a still-growing school-age population in primary education alongside rising demand for access to upper secondary (ERI, 2016[18]).

Figure 1.3. Change in public expenditure on primary and secondary institutions between 2010 and 2014



Note: Countries are ranked in descending order of change in public expenditure.
Source: OECD (2017[9]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en.

Despite this impressive increase in investment, Turkey continues to have the second lowest level of expenditure per student in absolute terms across OECD countries, second only to Mexico. Turkey spent USD 3 589 in purchasing power parity (PPP) to GDP per primary student and USD PPP 3 258 per student in secondary education for the most recent year (2014) where comparable data is available, almost three times below the OECD average (OECD, 2017[9]). As a share of GDP, Turkey invests less in education (4% in 2014) than other upper middle incomes countries[1] (5% on average in 2014) (OECD, 2017[9]; UIS, 2017[19]). While greater investment on its own is not sufficient to improve outcomes, expenditure in Turkey is at a level where an increase in funding could, with the right policies, yield significant gains. PISA 2015 shows that for countries like Turkey that invest less than USD PPP 50 000 cumulatively per student between the age of 6 and 15, an increase of USD PPP 10 000 is correlated with an increase in 26 points in the country's average science score, equivalent to over half a school year (OECD, 2016[17]).

Central government is the main source of public expenditure on education

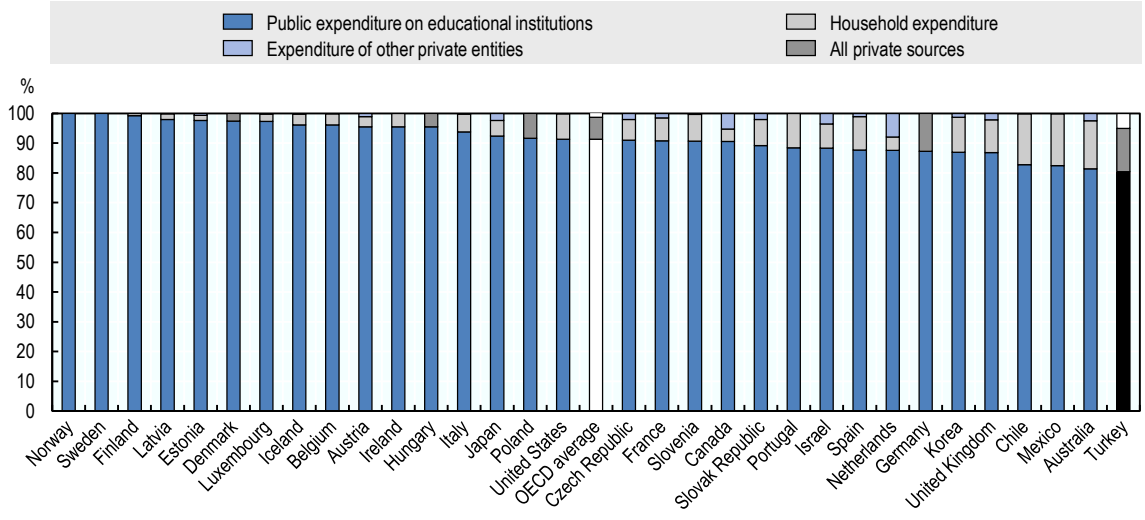
Almost all public funding for education in Turkey (98% in 2014) comes from the central government compared to around half (55%) on average in the OECD (OECD, 2017[9]). While the country's local self-governing authorities – Special Provincial Administrations and locally-elected provincial metropolitan municipalities – are expected to allocate 20% of their local budget to education, local spending on education represented only about 2% of education expenditure in 2014 (OECD, 2017[9]).

Turkey has the highest level of private spending on schools within the OECD

Schools rely heavily on private funds to cover their current expenditures, which can represent up to 40% of a public school's budget (World Bank, 2013[16]). Most of these private funds come from households, which accounted for 14% of total expenditure on schools in Turkey in 2014, the second highest share among OECD countries and more than twice the OECD average (see Figure 1.4). Secondary public schools are also allowed to fundraise from private entities such as firms and foundations and the private sector receives incentives to invest in schools through tax deduction programmes such as the "100% Support to Education Campaign" started in 2003 (OECD, 2013[13]).

Figure 1.4. Share of public and private expenditure on educational institutions, 2014

Primary, secondary and post-secondary non-tertiary



Note: Countries are ranked in descending order of share of public expenditure on educational institutions.
Source: OECD (2017[9]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en.

A new school funding formula aims to increase transparency and efficiency Turkey has introduced a school funding formula in an attempt to increase transparency and efficiency in school funding and address more effectively the needs of different schools. The formula allocates resources to schools based on the number of personnel and students, school type and infrastructure (MoNE, 2017[8]). While the use of such indicators represents an improvement over the previous incremental budgeting model, the current formula does not take into account socio-economic context or performance-based indicators, such as student

drop-out or results in national exams, which are important to ensure disadvantaged schools receive adequate support (OECD, 2017[20]). The lack of redistribution in the funding formula does not appear to be compensated by additional initiatives targeting poor schools. While Turkey has a conditional cash transfer programme to promote access to education for students from low-income families, other pro-poor funding schemes such as grants to disadvantaged schools remain relatively underdeveloped (UNICEF, 2012[21]; Köseleci, 2015[22]).

Reliance on private funds exacerbates disparities in funding as schools in wealthier areas have access to additional resources that are not available to those in less advantaged communities. Data from PISA reveals that Turkey has one of the biggest gaps between rich and poor schools in terms of access to material and human resources among OECD countries (OECD, 2016[15]).

The structure of Turkey's school system

Education is now compulsory until the end of upper secondary school

In 2012, Turkey increased compulsory schooling from 8 to 12 years with the goal of expanding participation in upper secondary education. The school starting age was also lowered from 6 to 5.5 years. As part of this reform, the education system was restructured to create lower secondary institutions (ISCED 2) distinct from primary schools (ISCED 1). Previously primary and lower secondary education had taken place in the same institutions as part of an uninterrupted "basic education" cycle. This new structure of schooling is called the "4+4+4 model", reflecting the equal length of the three levels of compulsory education (Köseleci, 2015[22]). It results in earlier transitions for students than in most OECD countries, where students tend to stay in their primary institution for longer and start upper secondary education later.

Students are tracked early into upper secondary schools

As in many OECD countries, students entering upper secondary school in Turkey can choose between different education programmes. However, the nature of this differentiation is distinct in several ways. First, students in Turkey choose their upper secondary school in Grade 8 at the age of 13, which is earlier than most OECD countries, where the most common age of selection is 15 (OECD, 2016[17]). In 2010, Turkey introduced a common curriculum in all schools during the first two years of upper secondary education (Grades 9 and 10) in an attempt to facilitate student transition between schools and reduce the stakes of the choice students make at age 13 for their future career pathway. However, in reality, very few students change schools because of the shortage of places and higher entry requirements. The new placement system for high school introduced in 2018 aims to provide students with greater flexibility to move high schools and programmes, within their local area (see Chapter 4).

A second distinguishing feature is the number of school types and programmes. While the main choice in most OECD countries with differentiated secondary pathways is between vocational and general programmes, students in Turkey have the option of seven different high-school types (Table 1.2). The perceived quality of these schools varies considerably, with the Science and Social Science High Schools being regarded as the most prestigious. With selection into upper secondary education based until recently primarily on results in a national standardised examination, the multiplicity of school types has contributed to high levels of disparity in educational access by background and ability. For example, students

in Science and Social Science High Schools performed more than 90 points higher than the national average in all subjects in PISA 2015 (equivalent to 2 extra years of schooling), and over 100 points higher than students in Anatolian Vocational and Technical high schools (see Table 1.2 and Figure 1.15). This unsurprisingly translates into unequal rates of transition into tertiary programmes (see Table 1.2).

Figure 1.5. The Turkish education system

<table>
<tr><th>ISCED level</th><th>Starting age</th><th>Grade</th><th colspan="2">Education programme in English (examinations where applicable)</th></tr>
<tr><td>8</td><td>24/25</td><td rowspan="3"></td><td colspan="2">Higher education – Doctoral studies</td></tr>
<tr><td>7</td><td>22/23</td><td colspan="2">Higher education – Master's programmes</td></tr>
<tr><td>6</td><td>18</td><td colspan="2">Higher education – Bachelor's programmes</td></tr>
<tr><td>5</td><td>18</td><td></td><td colspan="2">Associate degree diploma</td></tr>
<tr><td rowspan="4">3</td><td rowspan="4">13.5</td><td>12</td><td rowspan="4">Upper secondary general education (Basic Proficiency Test - TYT and Field Qualification Test - AYT)</td><td rowspan="4">Upper secondary vocational education (Basic Proficiency Test - TYT and Field Qualification Test -AYT)</td></tr>
<tr><td>11</td></tr>
<tr><td>10</td></tr>
<tr><td>9</td></tr>
<tr><td rowspan="4">2</td><td rowspan="4">9.5</td><td>8</td><td colspan="2" rowspan="4">Lower secondary education</td></tr>
<tr><td>7</td></tr>
<tr><td>6</td></tr>
<tr><td>5</td></tr>
<tr><td rowspan="4">1</td><td rowspan="4">5.5</td><td>4</td><td colspan="2" rowspan="4">Primary education</td></tr>
<tr><td>3</td></tr>
<tr><td>2</td></tr>
<tr><td>1</td></tr>
<tr><td>02</td><td>3</td><td rowspan="2"></td><td colspan="2">Pre-primary education</td></tr>
<tr><td>01</td><td>0</td><td colspan="2">Early childhood education and care</td></tr>
</table>

Source: Authors based on OECD (2016[23]), *Diagram of the Education System: Turkey*, http://gpseducation.oecd.org/Content/MapOfEducationSystem/TUR/TUR_2011_EN.pdf.

The ministry has sought to address these inequalities through a series of consolidation attempts, most notably by bringing most general high schools under the umbrella of "Anatolian High schools" (Kamal, 2017[24]; Clark, 2014[25]). The Tenth Turkish Development Plan includes the goals of reducing further the number of school types and enabling more flexible transition between programmes, in an attempt to achieve more equal standards of quality and relieve the pressure on students (Ministry of Development, 2014[7]). Changes to the student selection system are also intended to support these aims.

Table 1.2. Public secondary schools in Turkey, school year 2016/17

Type of secondary school	Number of schools*	Percentage of total enrolment*	Admission rate (%) into bachelor's programmes[1]	Average score in numeracy (PISA 2015)[2]
Anatolian High School	2 412	40	24	460
Science High School	294	2.9	54	538
Social Sciences High School	93	0.8	68	504
Anatolian Fine Arts High School	79	0.4	3	383
Multi Programme Anatolian High School	788	5.5	4	375
Anatolian Imam and Preacher High School	1 408	15	18	396
Anatolian Vocational and Technical High School	2 384	40	8	389

Sources: 1. MoNE (2017[26]), *Millî Eğitim İstatistikleri [National Education Statistics, Formal Education2016/2017]*, http://sgb.meb.gov.tr/meb_iys_dosyalar/2017_03/31152628_meb_istatistikleri_orgun_egitim_2016_2017_1.pdf;
2. OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

The process of student selection into upper secondary education is under revision

At the time of the OECD review team's visit, student high school selection was based on a centralised placement system called the Transition from Elementary Schools to Secondary Schools Exam – *Temel Eğitimden Ortaöğretime Geçiş Sistemi* (TEOG) introduced in the 2013/14 academic year. As part of TEOG, students ranked their upper secondary school preferences. They were then placed in one of their school choices based on their results in a centralised examination and their average score in lower secondary classroom assessments. The Turkish TEOG relied predominantly on the centralised examination to determine student placement, with the exam results accounting for 70% of the final placement score, while classroom assessment accounted for 30%.

While the TEOG was considered fair and transparent, it also created a high level of competition between students for school places. In response to these criticisms, the government abolished the TEOG exam in September 2017 and announced a new system of placement based on catchment areas, students' interests and overall achievement in lower secondary. The aim of this policy is to eliminate competition for high school placement, but the most elite schools, the science and social science high schools (as well as some programmes in high demand at technical and vocational schools) will continue to have a selection exam.

Placement into tertiary education is exam-based and highly competitive

A national two-stage placement system determines access to tertiary education and places students into the different programmes. The first stage is the Basic Proficiency Test – *Temel Yeterlilik Testi* (TYT) previously known as the Transition to Tertiary Education Examination – *Yükseköğretime Geçiş Sınavı* (YGS), a multiple-choice assessment of core subjects such as Turkish, social sciences, mathematics and science. Passing the TYT is sufficient to access short-cycle tertiary programmes (ISCED 5) where most students are enrolled. To access bachelor's programmes (ISCED 6), students need to take an additional test called the Field Qualification Test – *Alan Yeterlilik Testleri* (AYT), previously known as the Undergraduate Placement Exam – *Lisans Yerleştirme Sınavı* (LYS), in subjects relevant to their desired field of study. Students' preferences and results in the TYT, AYT and their average classroom marks during upper secondary are used to determine their

placement in bachelor's programmes through a centralised system that automatically assigns applicants to study programmes. The threshold to access most programmes is determined based on demand but the most selective programmes such as medicine, law and engineering have a minimum pre-set threshold. Turkey does not use a national examination to certify completion of upper secondary education. Instead, certification of upper secondary (i.e. receipt of the school leaving diploma) is based solely on students' average score in classroom assessments in Grades 9 to 12.

The selection exams carry very high stakes for students

With limited places available in the most prestigious upper secondary schools and bachelor's programmes, the placement exams are very competitive, creating a high level of stress among students. PISA 2015 shows that Turkish students report higher levels of test-induced anxiety than their peers in other OECD countries. More than one-fifth of Turkish students aged 15 agreed strongly with the statement "I often worry that it will be difficult for me taking the test" compared to 15% on average across OECD countries (OECD, 2017[27]). The pressure is even higher during examination years, with all stakeholder groups interviewed by the OECD review team highlighting the acute pressure faced by students at transition points to be one of the most significant challenges facing the education system.

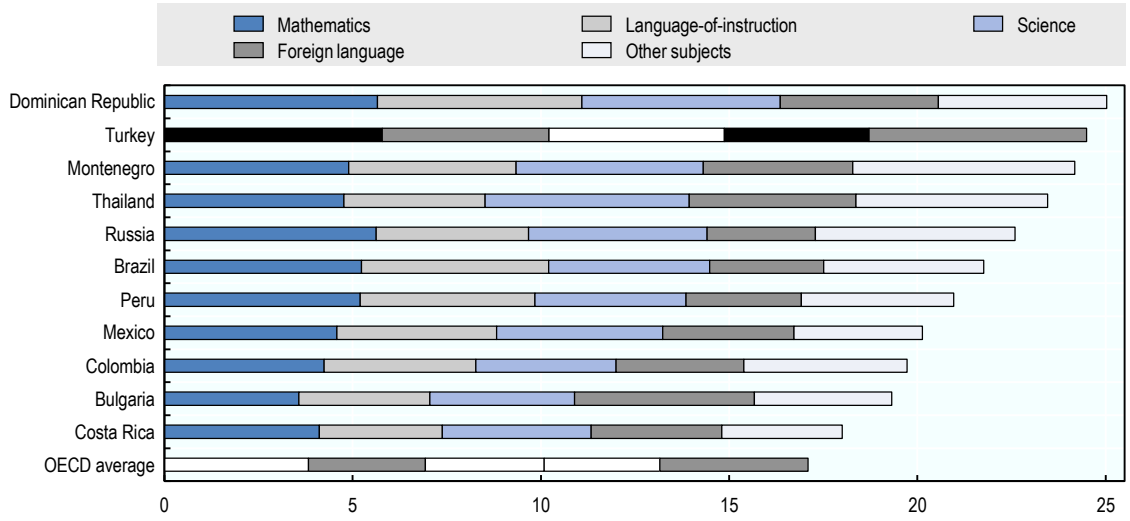
Research internationally indicates that while high stakes examinations might incentivise some students to apply themselves, they can have a negative impact on the motivation and learning of students who perform less well academically (OECD, 2013[28]). In Turkey, the pressure of high stakes-exams is associated with the disengagement and early drop-out of students with anticipated low results, as their chances of getting a place in their desired programme of study are slim (World Bank, 2013[16]). The high pressure of examinations also contributes to an excessive focus on examination preparation, which reduces time for learning (see Chapter 4). The extent to which the examinations were narrowing the curriculum taught in schools was a concern highlighted in many of the review team's interviews.

Parents also spend a significant amount of money on private tutoring so that students can attend the most desirable schools and bachelor's programmes. In 2015, Turkey had 3 800 private tutoring or cram schools known as *dershanes* that prepared students for the tertiary selection exam. These hidden costs have an impact on equity, with research in Turkey suggesting that only those households that can afford the very best tutoring services see any gain in examination results (World Bank, 2011[29]). Out-of-school tutoring also has a negative impact on student well-being as students spend long hours cramming for examinations and have little time for extra-curricular activities. In 2015, Turkish students spent on average 24.5 hours per week after school study (Figure 1.6), mostly in cram schools or individual tutoring sessions. This is the highest number of hours among all OECD countries participating in PISA 2015 (OECD, 2016[17]).

The Turkish government has made efforts to reduce examination pressure and address its negative impacts, including most recently with the decision to end selection for most upper secondary schools. The government also sought to close the *dershanes* in 2015.

Figure 1.6. Time spent in after-school study by subject

Number of hours reported by students in PISA 2015



Note: Countries listed in this graph are upper middle-income countries participating in PISA. Countries are ranked in descending order of total number of hours spent in after-school study.
Source: OECD (2016[17]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, http://dx.doi.org/10.1787/9789264267510-en.

Secondary vocational education and training has expanded

Turkey has sought, with success, to increase student enrolment in upper secondary vocational education and training (VET) programmes. In 2016, almost half of upper secondary students (49%) were enrolled in vocational programmes, higher than the OECD average of 41% and an increase of 22% compared to 2013 (OECD, 2017[9]). The budget allocated to VET on a per student basis has also nearly doubled in the last six years (MoNE, 2018[30]). Upper secondary VET programmes comprise of four-year programmes at the end of which students receive a Vocational and Technical High School Diploma. VET students can access tertiary education or the labour market by taking exams at the end of their studies. Students are taught all core subjects covered by the TYT from Grades 9 to 10 in order to prepare them to take this exam and make sure that they acquire the basics standards of mathematics, Turkish and science. In some specialist areas, such as computer hardware, students can also apply to take an additional exam in order to receive a Vocational Qualification Certificate. The exams are developed with representatives of the employers' federations and certificates are now aligned with the Turkish Qualifications Framework and the European Qualifications Framework, enhancing their value in the labour market (MYK, 2015[31]). While formally possible until the end of Grade 10, a transfer from vocational to general programmes is in reality very rare. Outside the formal school system, two to three-year apprenticeship programmes are offered to students who drop-out before completing compulsory education (OECD, 2013[13]).

While Turkey has some well-established VET schools that are attractive for students and are valued by employers, overall vocational and technical high schools are perceived to be less desirable and of poorer quality than general secondary schools. Fifteen-year-old students in VET schools performed below the national average in all subjects tested by PISA 2015 (Table 1.2). In response, improving the quality of VET schools is given high

priority in the Tenth Development Plan and the 2023 Education Vision proposes significant reforms, including on how to improve society's perception of the sector and support students' academic success (Özer, 2019[32]). Quality assurance has already been enhanced, with the General Directorate of Vocational and Technical Education undertaking a wide-ranging review of all secondary education institutions in 2018, with the results made public (MoNE, 2018[33]). This and other analysis has resulted in new policies with a focus on strengthening cooperation with the private sector, enriching on-the-job training and facilitating the transition to employment for graduates of VET high schools (Özer, 2018[34]).

Turkey has encouraged an increase in the number of private schools

With the public sector struggling to keep up with growing demand for schooling, the government has chosen to encourage the expansion of private schools. The share of private schools increased from less than 4% of total schools in 2001 to 13% in 2016 (ERI, 2016[18]). In the late 2000s, the government introduced a voucher programme to help students from low socio-economic backgrounds access private schools. However, the programme does not appear to have reduced inequality of access and tuition fees remain a major barrier to entry for most students (ERI, 2016[18]). No students from the bottom, second or third socio-economic quartiles participating in the PISA 2015 survey were enrolled in private schools, compared to 12.5% from the top quartile (OECD, 2016[17]). Despite their relatively high cost, learning outcomes as measured by PISA are on average significantly lower in private schools (86 points or the equivalent of two school years) than in public schools (OECD, 2016[15]).

Almost one-quarter of students attend open education high schools

A significant proportion (23% in 2017) of upper secondary students in Turkey follow distance learning programmes called open high schools (MoNE, 2017[8]). These programmes offer early school leavers or students who have been unwell for long periods of time the opportunity to complete their compulsory education. It was also reported to the OECD team that some students choose to enrol in open high schools to take advantage of their flexible schedule to have more time to cram for the tertiary selection and placement examinations.

Double-shift schools and large class sizes are common in urban areas

The average class size in Turkey has decreased in recent years but is still one of the largest in the OECD (ERI, 2016[18]; OECD, 2017[9]). Primary class sizes are now similar to those of other OECD countries (23 students in 2015 compared to 21), but Turkey continues to have the largest class size in lower secondary of all OECD countries (34 students compared to 23 in 2015). However, these national averages hide large disparities between schools. Turkey has the largest difference in class size between public and private schools among OECD countries: at the lower-secondary level, public schools had an average of 35 students per classroom while private schools average 20 students per classroom (OECD, 2017[9]). There are also significant geographical disparities: classes in some urban centres are overcrowded while some in rural areas are very small. Across the country, classes can range in size from an average of just 16 students in the East Black Sea region to 30 students in Istanbul at the primary level, with reports that some classes are much larger still (ERI, 2016[18]).

The large and varying class sizes in Turkey are the result of a number of factors, including the sizeable and growing student population, the migration of families from rural to urban areas, a centralised teacher deployment process which may create less flexibility to address

local needs, and a lack of public funds to increase the number of classes (OECD, 2013[13]; OECD, 2017[27]). In the past, to respond to the shortage of classrooms in some areas, the government created double-shift schools that serve one group of students in the morning and another in the afternoon. A significant proportion of students, in particular in densely populated areas such as Istanbul and Southeast Anatolia, are enrolled in these institutions. In 2015, half of the students in primary, 41% in lower secondary and 10% in upper secondary were enrolled in double-shift schools (ERI, 2016[5]). This method of education delivery can involve early starts, long instruction hours and a lack of breaks, which can be challenging for both teachers and students (Celik and Gür, 2013[10]). To address these concerns, the government of Turkey has committed to ending this practice by 2019 (ERI, 2016[5]).

Turkey has made significant efforts to educate refugee children from Syria

Since 2011, a large number of Syrian refugees have fled to Turkey, putting the education sector and other public services under severe pressure. In 2017, 3.4 million registered Syrian refugees were living in the country; about half were below the age of 18 while 30% were below the age of 11 (UNHCR, 2017[35]). Turkey has created learning centres in areas where refugees are settled, which provide educational materials in both Turkish and Arabic and training to Turkish teachers on how to help integrate refugees into the formal education system. As a consequence of these efforts and the government's continued collaboration with United Nations agencies, the enrolment rate of Syrian refugees in primary and secondary education is almost universal (UNHCR, 2017[35]). However, these activities have placed considerable strain on the already under-resourced education system. In 2015, the Turkish government spent $252 million on the education of Syrian refugees, which represented roughly 2% of the ministry's budget for the same year (ERI, 2016[18]; HRW, 2015[36]).

Teachers and school principals

Turkey has more than doubled its teaching workforce in the last two decades while at the same time raising qualification standards. However, there are some notable policy gaps, including quality assurance in initial teacher education, and professional development opportunities. To respond to these challenges, Turkey has developed a new Teacher Strategy (2017-23) with the goal of transforming teacher education and training and moving towards a performance-based career structure.

Turkey's large teaching population is young and gender balanced

The expansion of education access in Turkey and a still-growing school-age population has led to a dramatic increase in the teaching workforce, which today numbers around 968 000 people (MoNE, 2017[8]). This has resulted in a teaching population that is relatively young compared to most other OECD countries. In 2014, Turkey had the smallest percentage of teachers over the age of 50 among OECD countries (13% in primary, 8% and 11% in lower and upper secondary respectively). This is less than half of the OECD average for the same levels of education. With respect to gender distribution, Turkey's teaching population is more balanced than in most other OECD countries where women tend to outnumber men, especially at the primary level (OECD, 2016[37]). Turkey is, however, experiencing a gradual feminisation of the teaching workforce, in particular in upper secondary education, where the number of female teachers increased by almost 50% between 2012 and 2017 compared to 35% for men (MoNE, 2017[8]).

Teaching is financially attractive, though the salary scale is relatively flat

Teachers in Turkey are career civil servants, with guaranteed lifetime employment (European Commission/EACEA/Eurydice, 2015[38]). The social benefits and job security associated with such a position are among the main factors reportedly attracting young people into teaching, in a country where formal employment opportunities remain relatively limited (MoNE, 2017[8]). Teaching in Turkey is also a financially attractive option for a Turkish tertiary graduate. In contrast to most OECD countries, average statutory salaries for teachers with 15 years of experience are higher than those of other full-time tertiary-educated workers (OECD, 2017[9]). In 2015, primary teachers earned 14% more, and lower and upper secondary teachers earned 17% more than the average tertiary-educated worker (OECD, 2017[9]). On average across the OECD, teachers earned 4% to 10% less than tertiary-educated workers (OECD, 2017[9]). Salaries are also rising. Between 2005 and 2015, teachers' statutory salary grew by 21% at the lower and upper secondary levels, which was much higher than the average increase of 4% respectively across OECD countries (OECD, 2017[9]).

However, Turkey has the flattest teacher salary scale within the OECD. The statutory salary increases by only 8% after 15 years in the profession and is only 17% higher at the top of the salary scale compared to the starting salary. On average across OECD countries, teachers' statutory salaries increase by 37% after 15 years and by 68% at the top of the scale (OECD, 2017[9]). One factor associated with the lack of salary growth is the absence of a performance-based, differentiated career structure that would enable teachers to be awarded roles with increasing responsibilities (see Chapter 5).

Teaching certification requirements have increased and there are plans to include more practical training in initial teacher education

All teachers in Turkey are required to have at least a bachelor's degree (ISCED 6). Data from the Trends in International Mathematics and Science Study (TIMSS) shows that in 2015 the overwhelming majority of teachers in primary and lower secondary education had attained this level of qualification (86% in Grade 4 and 90% in Grade 8) (Mullis, Martin and Foy, 2003[39]). However, the percentage of teachers with a master's degree (ISCED 7) is relatively low (3% in primary and lower secondary) and, unlike the majority of OECD countries, a master's degree is not a requirement for teachers in lower and upper secondary (OECD, 2016[17]).

There are two main routes into the teaching profession in Turkey: a four-year programme leading to a bachelor's of education degree (concurrent); or a one-year teaching programme that teachers can take upon completion of a regular bachelor's degree (consecutive) (World Bank, 2011[29]). While this model is similar in structure to that of most European countries, the amount of practical training that teacher candidates receive is on average lower in Turkey (European Commission/EACEA/Eurydice, 2015[38]). Entry into faculties of education is based on a student's score in the national university placement exams. Although less common now than in the past, it is still possible for university graduates who have not trained to become teachers to be recruited to work in schools in the rural and eastern parts of the country (Celik and Gür, 2013[10]).

Information on the quality of initial teacher education programmes is limited. However, studies have raised concerns over the lack of alignment between programme content and the ministry's education policies, in particular, the school curricula (World Bank, 2011[29]). For example, teachers participating in a recent study on assessment practices reported that the training on assessment was too theoretical and did not address adequately classroom

realities or stated policy priorities such as making better use of formative methods (Kan, 2017[40]). Governance arrangements contribute to these alignment challenges in Turkey. Responsibility for determining initial teacher training programmes falls the under the Council of Higher Education (*Yükseköğretim Kurulu Başkanlığı*, YÖK), which is independent of the ministry, and there is currently no formal process in operation for accrediting teacher education programmes (EPDAD, 2016[41]).

As part of its new Teacher Strategy 2017-23, Turkey aims to restructure initial teacher training provided by universities by introducing more practical training in schools where trainees will be supervised by a certified teacher. The strategy also includes plans to introduce standards for initial teacher training to ensure greater consistency in the quality of training across providers (MoNE, 2015[12]).

New teachers are assigned to their first positions, generally in challenging regions, based on their ranking in the teaching entrance exams

Teachers are deployed to provinces based on their interests and their results on two teaching entrance exams: the Public Service Personnel Selection Examination (*Kamu Personel Seçme Sınavı*, KPSS), a 50-question assessment of educational science knowledge and general aptitude; and the Teacher Content Knowledge Exam (*Öğretmenlik Alan Bilgisi Testi*, ÖABT), which tests teachers' subject-specific knowledge (MoNE, date). In order for an individual to be to apply for a teaching position, they need to achieve a minimum score of 50 points on the KPSS.

Most new teachers are first assigned to rural, disadvantaged parts of the country, notably the eastern provinces (ERI, 2016[18]). In the past, they received little or no additional initial or in-service preparation for working in such challenging contexts and these provinces experience high rates of teacher turnover (ERI, 2016[18]). Partially to address some of these issues, in 2015 Turkey introduced a new probation and induction programme to provide additional support to new teachers and help them adapt to the realities of the classroom (see Chapter 5).

Turkey has introduced an ambitious Teacher Strategy to improve teaching quality

Turkey's new Teacher Strategy 2017-23 recognises the need to improve the quality of initial teacher training, decrease disparities between regions by improving working conditions and develop a more progressive career development path. Above all, the strategy aims to raise the competencies of the existing workforce by improving teachers' professional development. Currently, the provision of professional development is managed directly at the central level by the ministry and the provincial directorates. Professional development is free of charge but is organised away from the school and is not linked to career progression. While some training courses are mandatory, teachers in Turkey undertake professional development far less than their counterparts in other OECD countries. Less than a quarter of science teachers from schools participating in PISA had attended a professional development programme in the three months leading to the PISA 2015 test, half the OECD average rate (OECD, 2016[17]). To improve professional development and make sure that it responds better to teachers' needs, the Teacher Strategy plans to introduce a new School-Based Professional Development Model which will use teachers' self-evaluations to develop an individual professional development plan. The content of professional development will also be informed by a newly revised and simplified Teacher Competencies Framework (MoNE, 2017[42]).

Curriculum

The intended curriculum is competency-based and student-focused

As in many OECD countries, recent curriculum reforms in Turkey have sought to shift the focus of learning from the acquisition of theoretical, content knowledge towards a competency-based approach that challenges learners to apply what they know and can do in real-world contexts. Reforms have also placed a strong emphasis on the active role that students should play in the learning process, in contrast to established practices that were teacher-centred and focused heavily on rote memorisation. These new approaches were first introduced in 2005, in a landmark reform that resulted in the complete redevelopment of teaching and learning materials in primary and secondary schools (Köseleci, 2015[22]). Since then, there have been frequent updates and modifications to the curriculum. The most recent revisions were introduced in 2017, with a focus on reducing curriculum overload, elevating the importance of 21st century competencies such as critical thinking, creativity and communication, and enhancing the relevance of the school curriculum to the labour market (see Chapter 2).

Full implementation of the curriculum requires further support

Independent studies have shown that the changes introduced since 2005 represent an improvement over the curriculum used in the past (World Bank, 2013[16]). They place emphasis on the learning outcomes that are most important for individual success and economic development and value the types of individualised teaching approaches and active student engagement that research indicates are important for effective learning (Dumont, Istance and Benavides, 2010[43]). However, successive curriculum changes have also created concerns about fragmentation and incoherence in the overall vision for student learning in Turkey (see Chapter 2).

The 2005 reforms were accompanied by new teacher guidebooks and changes to teachers' in-service and induction programmes. Subsequent changes have likewise been followed by training and dissemination efforts. However, many teachers remain reliant on multiple-choice items and do not feel confident using the types of formative and performance-based assessment methods that the curriculum requires (Kan, 2017[40]). Teachers met by the OECD review team also reported some level of fatigue with the rapid rhythm of curriculum reforms that are not followed up by enough with guidance.

The evaluation and assessment system

Major changes are underway to evaluation and assessment policies in Turkey

Improving the effectiveness of evaluation and assessment policies is a key priority for Turkey. At the time of this review, significant changes were either underway or being planned in the areas of student assessment, teacher appraisal, school inspection and system evaluation. This includes: a new national assessment of student learning, (*Akademik Becerilerin İzlenmesi ve Değerlendirilmesi*, ABİDE), as well as the Student Learning Achievement Monitoring Assessment, the Turkish Language Skills Study and the Common Examinations initiative[2]; the introduction of a performance-based career structure for teachers; and a new school evaluation system (although the new systems for teacher appraisal and school evaluation had not been decided at the time of the OECD review). These reforms reflect the growing emphasis that the Turkish government is placing on the

effectiveness of education and other public services, and the consequent need for stronger levers to influence performance.

The Ministry of National Education collects considerable information on system performance for monitoring and control purposes The share of schools in Turkey that report that administrative data is systematically recorded, like the students attending school and teachers being present for the classes that they teach (77%) and student test results and graduation rates (89%), is the highest among OECD countries (OECD, 2016[17]) . Such extensive data collection has enabled important innovations, such as the e-School Management Information System which enables parents to receive real-time information on their mobile phone on their child's attendance and grades (UNICEF, 2012[21]). Greater use could be made of this data for evaluative and learning purposes, like providing schools with more information on their examination results to explain disparities in performance or common errors in student understanding (see Chapters 4 and 5). The ministry's projects like the establishment of the new measurement and evaluation centres in the country's provinces and the project to strengthen teachers' capacity for classroom assessment reflect efforts to improve monitoring and evaluation practices to support learning.

Main trends in participation, outcomes and equity

Turkey is one of the few emerging economies to have realised a rapid expansion in education access while at the same time improving learning outcomes and reducing inequity. This impressive achievement was the result of the large-scale reforms that Turkey implemented in the late 1990s and 2000s. An overview of current system performance shows that this reform drive needs to continue, with a sharpened focus on achieving more equal standards in schooling and improving the quality of teaching practices.

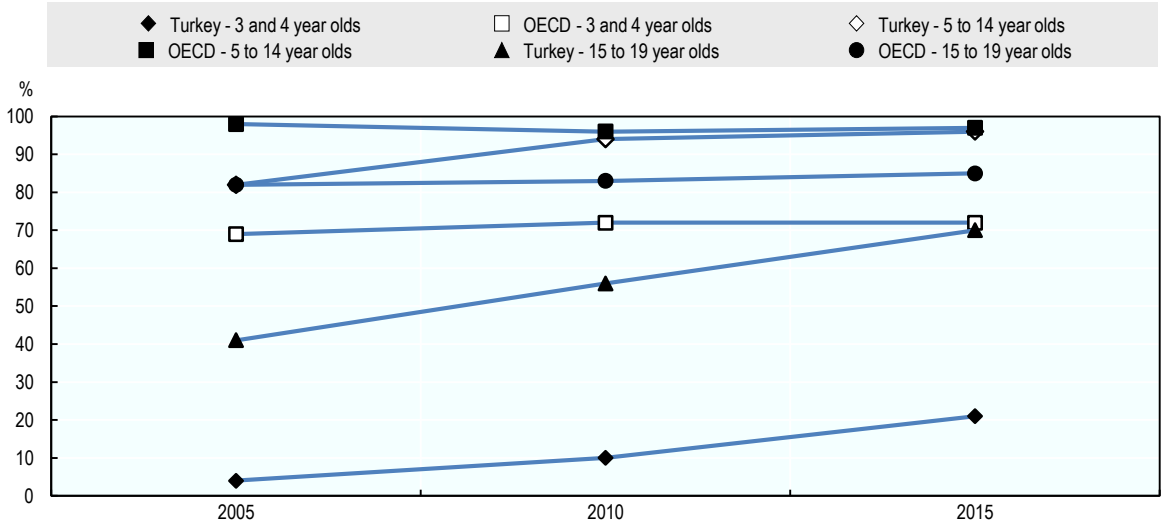
Participation

Access to education has increased dramatically

Over the past two decades, Turkey has achieved one of the fastest increases in education enrolment within the OECD. Participation in primary and lower secondary school had caught up with the OECD average by 2010 and became universal by 2015, gains all the more remarkable given the need to absorb a still growing school-age population. The most rapid increase was observed for the age cohort 15 to 19 (upper secondary students), with enrolment rates increasing by 70% between 2005 and 2015 (see Figure 1.7). While upper secondary enrolment is still one of the lowest among OECD countries (78% compared to 83% in 2015), it is relatively high compared to other high middle-income countries (60%) (UIS, 2017[19]).

This sharp increase in enrolment was the result of proactive policies to expand supply, tackle the main obstacles to access, and improve efficiencies in the school system. Alongside a massive investment in school and classroom construction, important initiatives in Turkey have included the introduction in the early 2000s of an electronic system to manage student flow and the launch of cash transfers programmes and awareness campaigns to increase the participation of girls and socio-economically disadvantaged groups (Sasmaz, 2015[44]).

Figure 1.7. Enrolment rate by age group, 2005-15

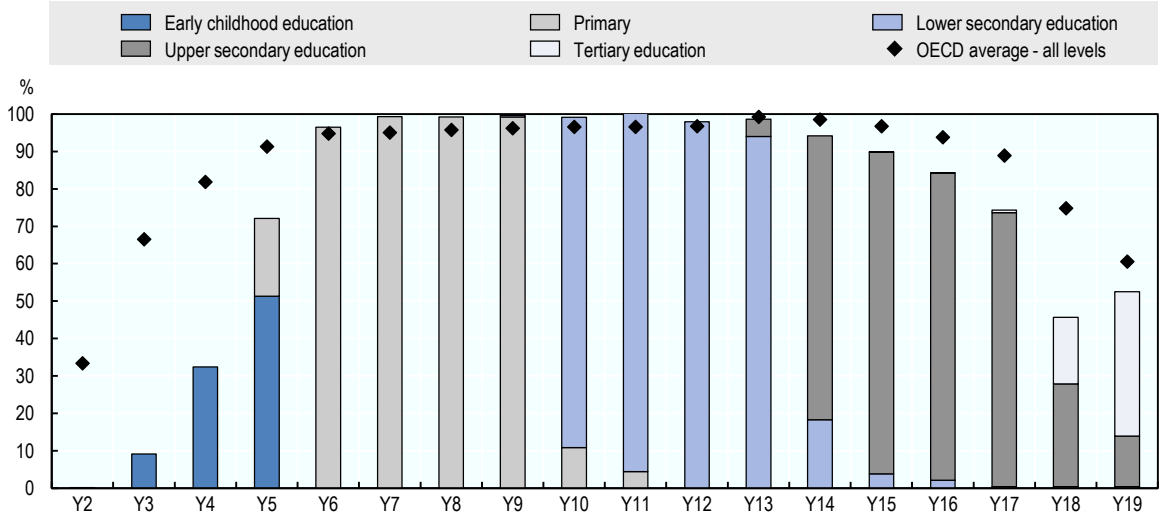


Source: Authors' calculations based on OECD (2018[2]), *OECD Statistics*, https://stats.oecd.org/ (accessed on 20 February 2018).

But many students still do not complete a full cycle of schooling

Despite being compulsory, a relatively high share of students do not complete upper secondary school. In 2015, a fifth of students had already left the school system before age 17 (see Figure 1.8). Drop-out starts to become a problem in Turkey at the transition between lower and upper secondary education (14-year-olds) when students are tracked into the different types of schools and programmes. An in-depth study by UNICEF of out-of-school children in Turkey has identified that low levels of learning in the early years and limited in-school support to students at risk of falling behind are among the main factors contributing to drop-out (UNICEF, 2012[21]).

Figure 1.8. Enrolment rate by age and level of education, 2015



Source: Authors' calculations based on OECD (2018[2]), *OECD Statistics*, https://stats.oecd.org/ (accessed on 20 February 2018).

A fifth of 3- to 4-year-olds attended early childhood education in 2015

One in five children aged 3 to 4 attended an early childhood education programme in 2015 in Turkey, compared to 72% on average across OECD countries (Figure 1.8). The average length of early childhood education and care (ECEC) is also the lowest among OECD countries. A Turkish student attended on average only one year of pre-primary education compared to three years on average in OECD countries. The length of pre-primary education varies greatly depending on students' socio-economic background. Students from the top income quartile start pre-primary on average half a year earlier than those in the bottom quintile (OECD, 2016[17]). Sustained access to high-quality education can yield significant gains later in learning. Across the OECD, on average, students score four points higher in science for every additional year they spend in pre-primary education (OECD, 2016[17]).

Turkey has made improving access to early childhood education a priority. The country's 2018-20 medium-term plan commits to expanding the coverage of pre-school education, in particular among five-year-olds (Ministry of Public Works and Development, 2017[45]). Meeting this target is likely to require a significant increase in spending. Currently, only about 1% of total education expenditure is allocated to early childhood and Turkey has the second lowest per GDP spending on this level among OECD countries, despite having a much larger population of pre-school age (OECD, 2017[9]; ERI, 2016[18]).

Participation in tertiary education has expanded

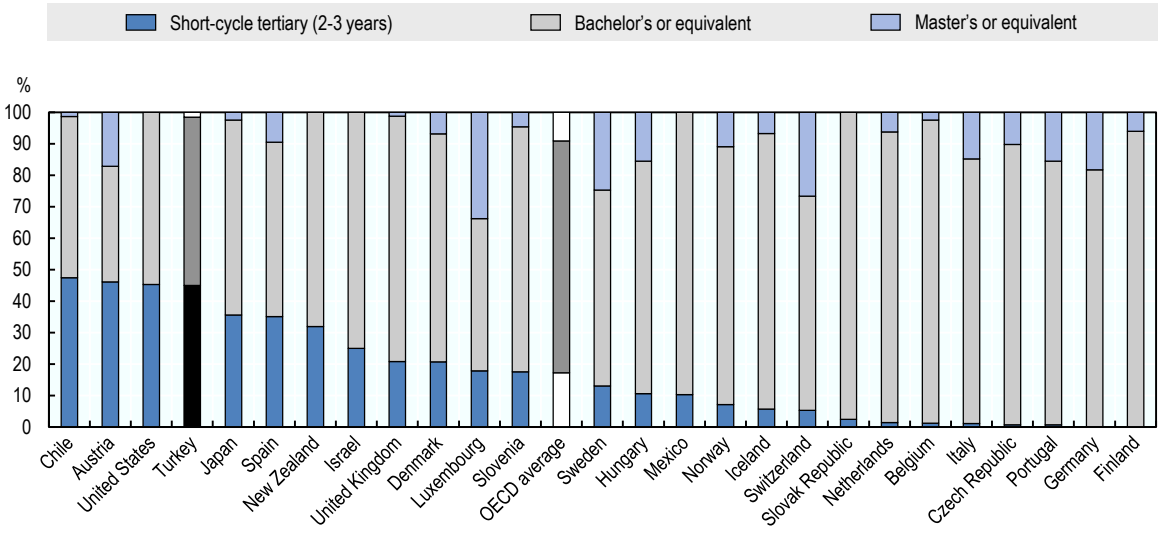
Turkey has seen the fastest increase in tertiary graduation rates among OECD countries, with the share of young people having attained this level rising three-fold since 2000 (OECD, 2017[9]). The tertiary enrolment rate among 19-year-olds is now at the level of the OECD average (38% in 2016) and higher than in other upper middle-income countries such as Mexico (24%). This expansion was mainly enabled by the development of distance learning programmes (open universities) and evening courses that provide short-cycle tertiary degrees (World Bank, 2007[46]). In 2016, almost half of students (45%) entering tertiary education enrolled in short-cycle tertiary programmes (ISCED 5), which is one of the highest shares among OECD countries. In comparison, the percentage of students entering a bachelor's programme in Turkey is, at 55%, among the lowest and far below the OECD average of 72% (Figure 1.9).

Restricted access to bachelor's programmes puts pressure on the school system and increases competition between students for the limited places available (see Chapter 4). It also represents a potential brake on economic growth, with more than half of employers reporting difficulties in hiring skilled workers (Manpower, 2015[47]). Positions in engineering are reportedly among the hardest to fill, with Turkey registering the lowest share of students entering a science, technology, engineering and mathematics (STEM) programme among OECD countries (18% in 2015 compared to 27% on average in the OECD), (OECD, 2017[9]; Manpower, 2015[47]).

Drop-out is also a challenge in tertiary education in Turkey. This is particularly true in short-course programmes, where about a third of students are expected to drop out before completing their degree (OECD, 2017[9]). Among other factors, studies have signalled the weak basic skills of tertiary entrants as contributing to low completion rates, with many students in Turkey leaving high school with relatively low levels of literacy and numeracy and limited learning-to-learn skills (World Bank, 2007[46]). Data from the Survey of Adults Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) shows that the average proficiency of Turkish youth in core areas

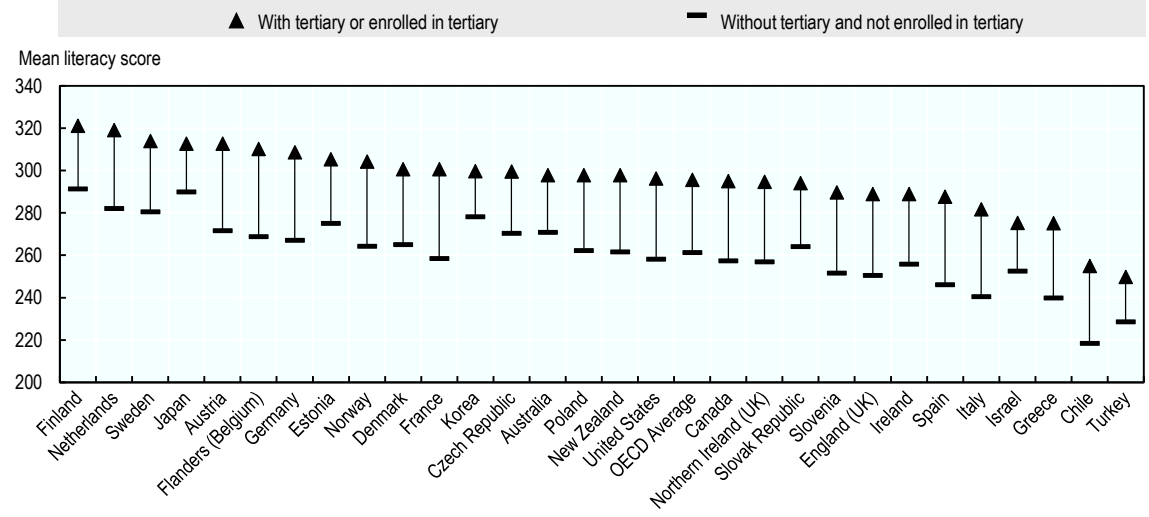
such as literacy is well below that of most other OECD countries, and that even those having completed tertiary have not, at least in the past, reached a level of full proficiency (Level 3, or a score of 276) (OECD, 2013[48]).

Figure 1.9. Share of new entrants into tertiary by level of education



Note: This figure refers to students entering tertiary education for the first time regardless of tertiary level. Countries are ranked in descending order of share of new entrants in short-cycle tertiary.
Source: OECD (2017[9]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en.

Figure 1.10. Mean literacy proficiency by educational attainment among 20-24 year-olds (Survey of Adult Skills)



Source: OECD (2016[6]), *Skills Matter: Further Results from the Survey of Adult Skills*, http://dx.doi.org/10.1787/9789264258051-en.

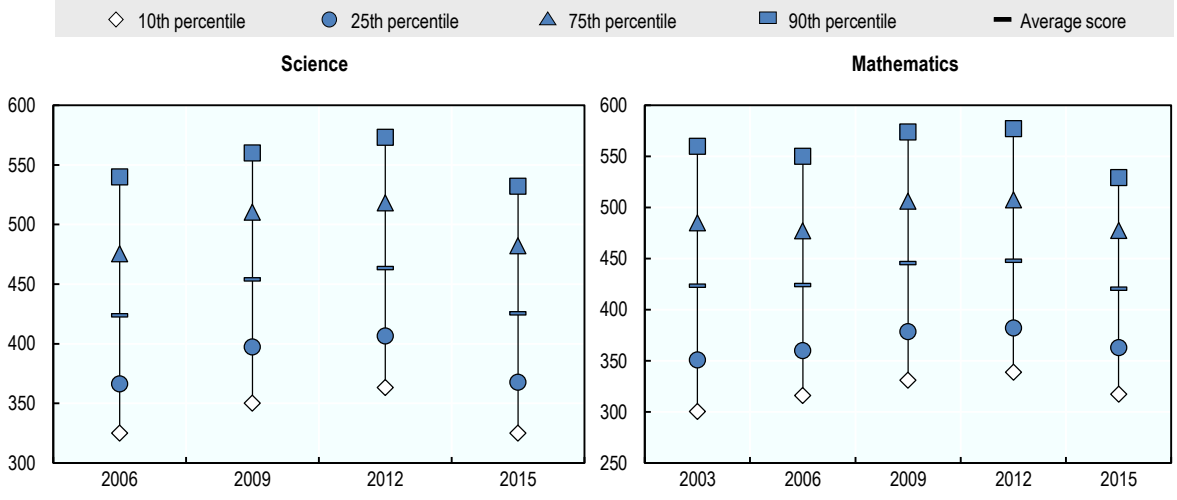
Learning outcomes

Students' learning outcomes have improved significantly over the past decade

Turkey is among the few countries that have improved student learning outcomes while expanding access to education. Turkish students' performance in the PISA tests increased significantly between 2003 and 2012 (see Figure 1.11). This marked improvement across subject areas was primarily related to a decrease in the share of students performing below the PISA proficiency Level 2, which is the level at which students are considered to have mastered the basic skills[3] required for further learning and full participation in society (Figure 1.12). In mathematics, the share of low performers decreased by 10 percentage points between 2003 and 2012, the second highest decrease among OECD countries after Mexico. Similar improvements are also observed in primary education as shown by the increase in the average mathematics and science performance in the TIMSS test for Grade 4 students (Mullis et al., 2016[49]).

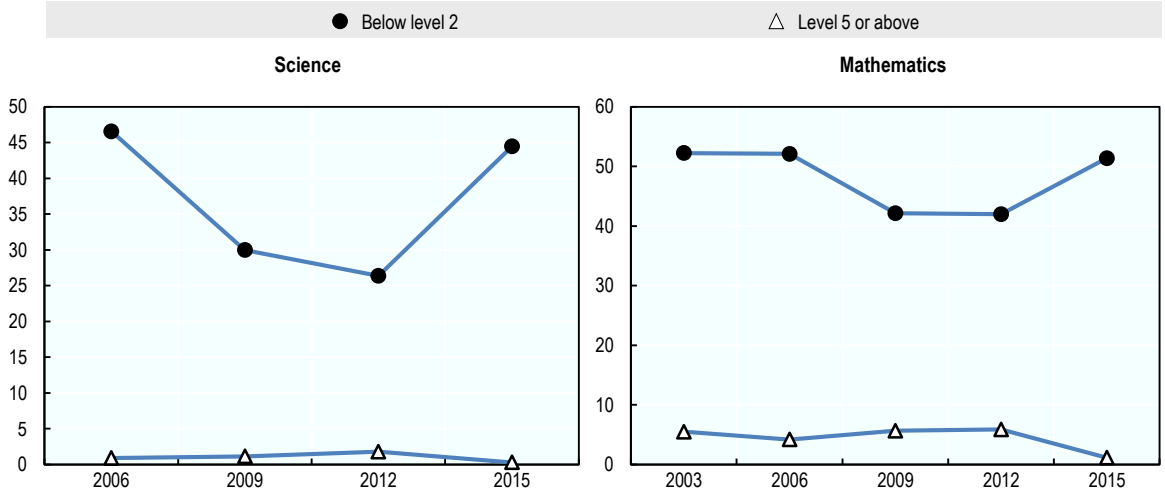
Improvements in learning outcomes in Turkey are even more impressive when accounting for the country's level of economic development and the rapid expansion of its student population. Turkey's PISA 2015 average score in science is 30 points higher when accounting for GDP per capita (OECD, 2016[15]). Moreover, taking in account the rapid expansion of student enrolment between 2003 and 2012, the increase in student performance in PISA is twice as large in mathematics and five times greater in reading[4] (Spaull, 2017[50]). However, Turkey experienced a steep decrease in its performance in PISA 2015 compared to previous editions of the survey, which is difficult to explain. Data from PISA 2018 and improved data on learning from national monitoring will be important to understand whether progress in learning outcomes has indeed stalled.

Figure 1.11. Score distribution in the PISA science and mathematics tests, 2003-15



Source: OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

Figure 1.12. Percentage of low achievers and top performers in the PISA mathematics and science tests, 2003-15)



Source: OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

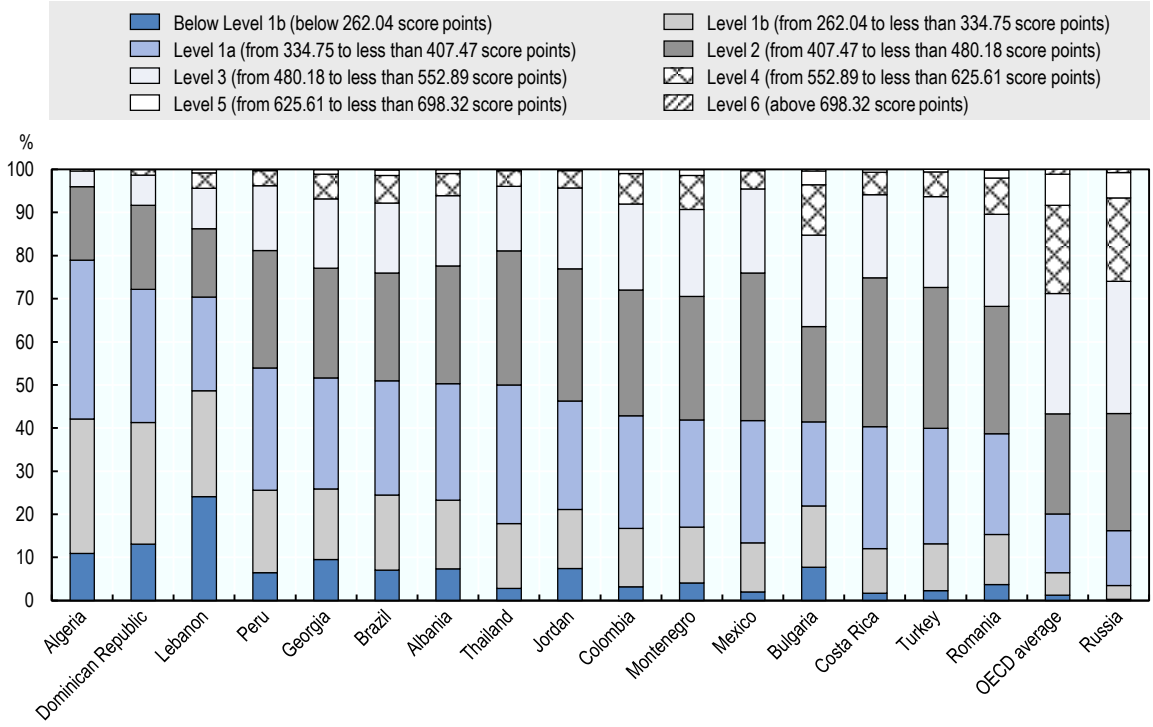
Average achievement remains low compared to OECD countries

While learning outcomes in Turkey compare favourably to other upper middle-income countries (Figure 1.13), they remain low compared to the OECD average and a long way from what is required to meet Turkey's economic and educational objectives. Forty percent of students in Turkey do not demonstrate basic literacy by age 15 and more than half do not reach basic numeracy levels (below the PISA 2015 proficiency Level 2 in these two domains). This represents the second largest share of low performers among OECD member countries, after Mexico.

At the other end of the learning spectrum, less than 1% of Turkish students were "high achievers" in PISA 2015, performing above proficiency Level 5 in the mathematics test. This compares to 8% on average within the OECD (Figure 1.13). While the national curriculum places strong emphasis on higher-order competencies such as critical thinking, only a minority of students are demonstrating these abilities by the time they reach upper secondary school. PISA 2015 also assessed student's abilities to solve collaboratively real-world problems. This included important competencies such as negotiating the meaning of a problem and understanding the roles needed to solve it. The performance of Turkish students was the furthest from average OECD levels of attainment in these areas (OECD, 2016[15]).

Figure 1.13. Percentage of students at each proficiency level in reading in PISA 2015

Upper middle-income countries participating in PISA



Note: Countries are ranked in descending order of the share of students performing below Level 2.
Source: OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

More teachers are trying to use pedagogical practices associated with effective learning

Teachers and the quality of their teaching are the most important school-related factor in student learning outcomes. Data on the practices of teachers in Turkey is relatively limited. The information that exists suggests that recent years have seen some improvements. Issues that were very common a decade ago in Turkey, such as teacher absenteeism and arriving late, are no longer a problem according to principals surveyed by PISA (OECD, 2016[17]). Data from PISA also suggests that teachers in Turkey are seeking to use the types of pedagogical practices associated with effective learning, with students reporting that teachers provide regular feedback and adapt their teaching to students' needs (OECD, 2016[17]). PISA also indicates that teachers are trying to encourage more enquiry-based learning, which is in line with the instructional goals of the curriculum. However, what information there is on the quality of these practices suggests that teachers could use new approaches more effectively. For example, recent research on teachers' assessment literacy revealed gaps in fundamental areas, such as how to identify a student's learning level and diagnose difficulties (Kan, 2017[40]).

Classroom disruption and students skipping school can hinder learning

A positive, supportive school environment is important for student learning. While bullying and the use of drugs and alcohol are relatively rare in Turkish schools compared to some OECD countries, other factors such as student absenteeism and classroom disruptions are more common and likely to have a negative impact on learning (OECD, 2016[17]). Almost half (45%) of students participating in PISA 2015 have reported skipping a whole day of school in the two weeks before the test which is more than twice the OECD average (20%). PISA shows that absenteeism in Turkey has both a negative impact on the student's own learning performance but also on that of his or her peers (OECD, 2016[17]). Unlike most OECD countries, absenteeism in Turkey is significantly more common in socio-economically advantaged schools than disadvantaged schools, a difference that might be explained have been explained in the past by students skipping school to attend tutoring classes to prepare for exams (OECD, 2016[17]). Classroom disruptions by students such as noise and disorder in class and students not listening to their teachers are also more common in Turkey than in most countries participating in PISA 2015 (OECD, 2016[17]).

After-school study support is limited

Turkish schools provide students with limited study help outside of classroom instruction time. Half of Turkish students (49%) go to schools that are not equipped with rooms dedicated for homework and the majority (63%) are in schools that do not provide staff to help with homework (OECD, 2016[17]). Such resources are particularly important for students from disadvantaged backgrounds and families with low levels of parental education. In most OECD countries such supports are made widely available. Recently, Turkey has taken steps to expand additional support and learning opportunities for students who are struggling. Efforts include the support and catch-up classes introduced in 2017-18 in lower secondary schools and a joint MoNE-UNICEF initiative piloted 2017, the Remedial Education Programme (İYEP). The İYEP aims to support students from Grades 3 and 4 with major gaps in key literacy and numeracy competencies, by providing additional support from classroom teachers and school counsellors.

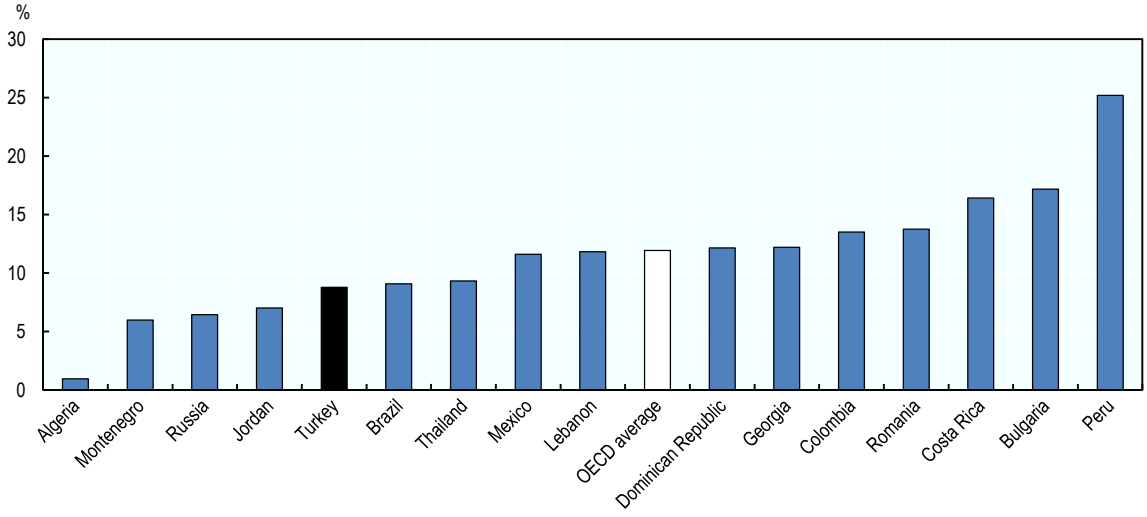
Equity

Equity in learning outcomes is improving

Equity in learning outcomes in Turkey has improved over the past decade. A student's socio-economic background was, for instance, a weaker predictor of his/her score in PISA 2015 than it was in PISA 2006. While 16% of variation in students' science performance could be explained by their socio-economic background in PISA 2006, this prediction power decreased to 9% in PISA 2015 (OECD, 2016[15]). Turkey has also relatively more equitable learning outcomes compared to the OECD average and to other upper middle-income countries participating in PISA 2015 (see Figure 1.14). However, the most advantaged students in Turkey continued to outperform the least advantaged by about 66 points in the science PISA 2015 test, which is the equivalent to roughly two extra years of schooling (OECD, 2017[27]).

Figure 1.14. Percentage of variance in PISA 2015 reading scores explained by students' socio-economic status

Upper middle-income countries participating in PISA 2015

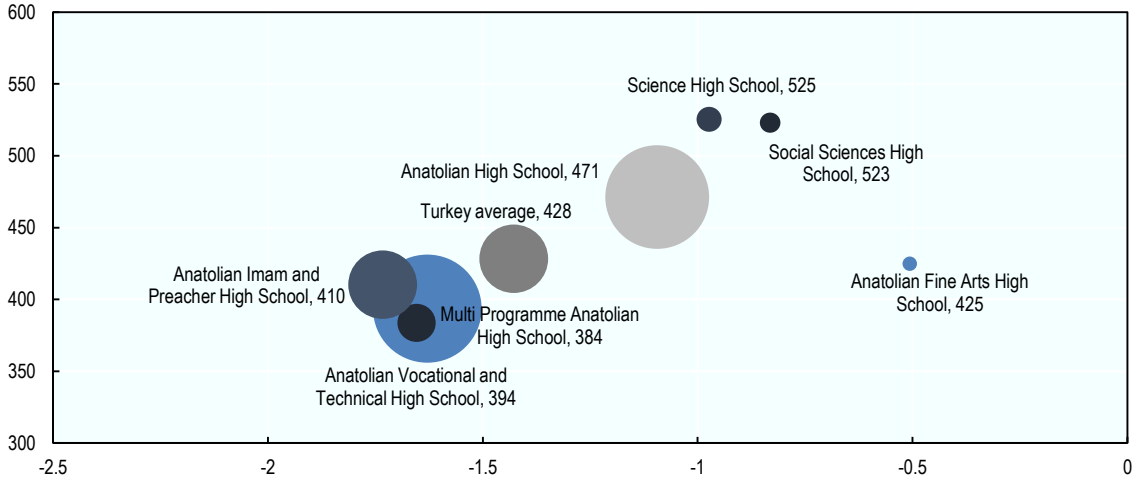


Note: Countries are ranked in ascending order of percentage of variance explained by students' socio-economic status.
Source: OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

Students in the most prestigious schools tend to come from more advantaged backgrounds

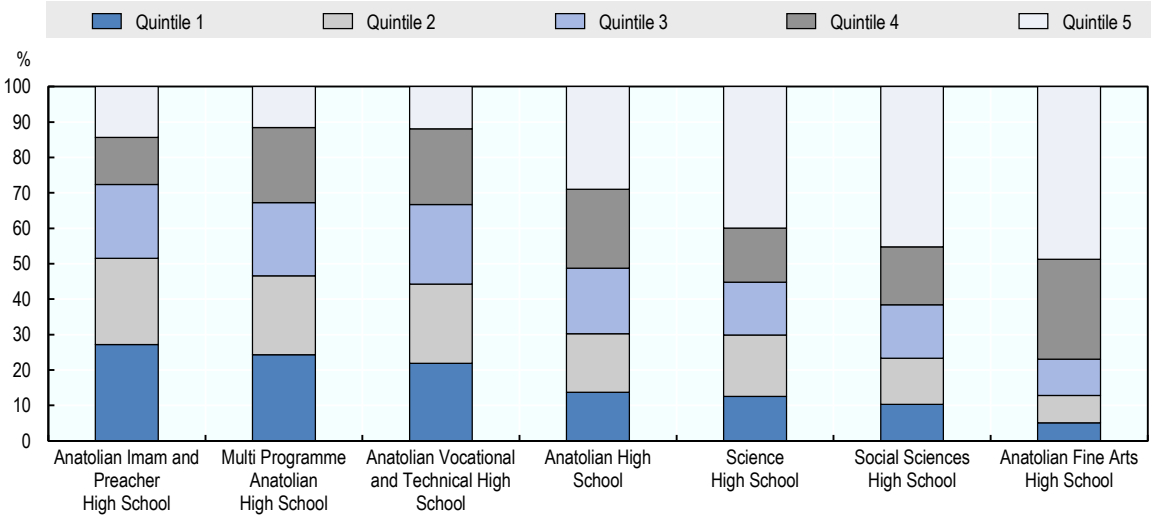
As is the case in most countries that track students into different upper secondary programmes based on their academic performance, schools in Turkey demonstrate a relatively high level disparity in educational access by social background. In other words, the practice of grouping students by ability accentuates social and educational disparities, with the most prestigious schools (science and social science high schools) attracting students that are both high performers and come from the most advantaged socio-economic backgrounds (see Figure 1.15). Almost half of the students in these schools come from the top quintile according to the PISA Index of Economic, Social and Cultural Status[5] (ESCS), while only about 10% of students came from the least advantaged quintile (Figure 1.16). While the 2018 reform to the placement system plans to eliminate ability grouping in most schools, places in science, social science and other prestigious high schools (10% of places in a given catchment area) will still be allocated based on performance (see Chapter 4).

Figure 1.15. Average reading score and average ESCS by type of school (PISA 2015)



Note: PISA ESCS is the PISA Index of Economic, Social and Cultural Status. The size of the bubble represents the sample size in PISA 2015.
Source: Authors' calculation based on OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

Figure 1.16. Distribution of PISA 2015 students by quintile of socio-economic background and type of programmes



Note: Type of schools are ranked in descending order of share of students from the lowest socio-economic quintile.
Source: Authors' calculation based on OECD (2016[17]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, http://dx.doi.org/10.1787/9789264267510-en.

Education access and outcomes vary significantly by geographic location

Turkey has the highest degree of inter-regional socio-economic disparity among OECD countries, a pattern reflected also in education opportunities and outcomes (OECD, 2016[1]). In 2016, more than a third of young people aged 25-34 had attained a tertiary level of education in the rich western regions of Istanbul and West Anatolia, while less than a quarter had attained this level in the less developed eastern and northern regions (Central-East Anatolia, West Black Sea, Central Anatolia, Northeast Anatolia, Southeast Anatolia) (Table 1.3).

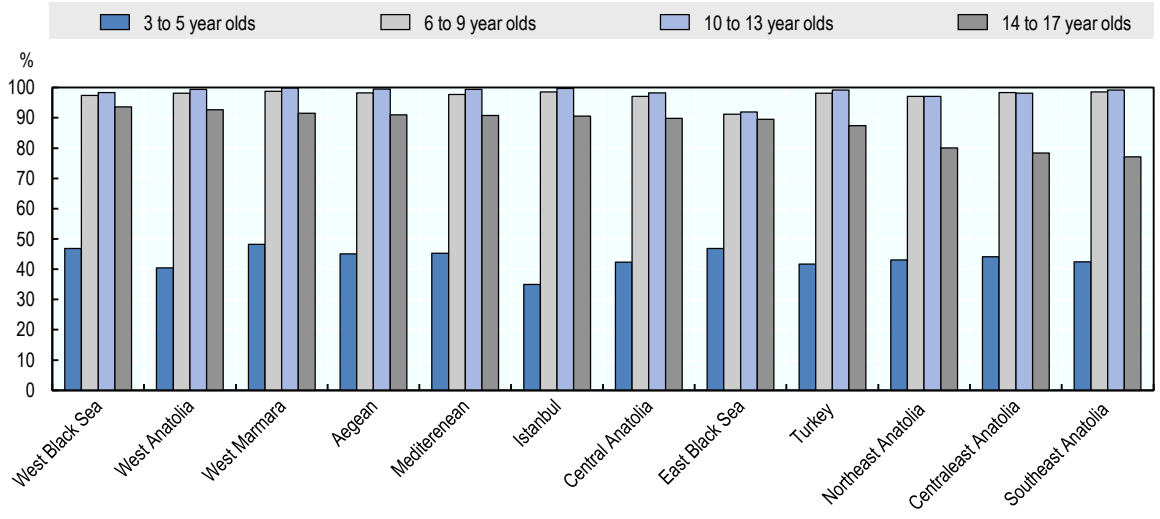
Disparities in school participation start to become pronounced when students enter upper secondary education, and opportunity costs combined with other factors begin to weigh more heavily (Figure 1.17). Net enrolment rates in high school are over 85% in western regions while they are below 70% in the less developed Eastern and Southern parts of the country (ERI, 2016[18]). In some communities, drop-out begins even earlier, in particular in poor, rural areas where some children need to combine study and work (UNICEF, 2012[21]). Almost half of households in rural areas are engaged in subsistence farming, which influences child attendance and contributes to a negative cycle of low levels of learning, disengagement and ultimately leave formal education early (UNICEF, 2012[21]). Turkey recorded the highest degree of disparity in learning outcomes between rural and urban areas among upper middle-income countries and OECD countries participating in PISA 2015 (OECD, 2016[15]).

Table 1.3. Socio-economic indicators by region

Regions	Total population, all ages (2016)[1]	GDP per capita, USD (2014)[2]	Unemployment rate (%), 25 years old and above (2016)[2]	Tertiary attainment rate (%) of 25-34 year-olds (2016)[3]
Istanbul	1 465 700	19 957	12	36
West Anatolia	7 643 316	13 264	8	34
East Marmara	7 499 360	14 702	8	30
East Black Sea	2 572 850	8 493	4	30
West Marmara	3 387 451	12 172	6	29
Aegean	10 138 145	11 638	8	29
Turkey average	7 874 110	12 112	9	29
Mediterranean	10 039 948	9 798	10	27
Central-east Anatolia	3 824 820	6 087	8	24
West Black Sea	4 502 521	8 446	6	23
Central Anatolia	3 894 345	8 892	9	22
Northeast Anatolia	2 195 359	6 383	4	21
Southeast Anatolia	8 385 548	6 252	17	21

Sources: 1. OECD (2018[2]), *OECD Statistics*, https://stats.oecd.org/ (accessed on 20 February 2018); 2. TUIK (2018[51]), *Turkish Statistical Institute*, http://www.turkstat.gov.tr (accessed on 01 February 2018); 3. OECD (2017[9]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en.

Figure 1.17. Net enrolment rate by age group and region, 2016



Note: Regions are ranked in descending order of net enrolment rate of 14-17 year-olds.
Source: MoNE (2017[26]), *Millî Eğitim İstatistikleri [National Education Statistics, Formal Education 2016/2017]*, http://sgb.meb.gov.tr/meb_iys_dosyalar/2017_03/31152628_meb_istatistikleri_orgun_egitim_2016_2017_1.pdf.

Girls' participation in school has increased significantly

Turkey has significantly improved girls' participation in education. Over the past decade, the country achieved gender parity in both primary and lower secondary education and increased dramatically girls' access to high school. At the upper secondary education level, the gender parity index narrowed from 0.6 in 2000 to 0.9 in 2015 (UIS, 2017[19]). This success was driven both by the overall push to expand enrolment as well as by national awareness campaigns specifically targeting girls' such as the MoNE-UNICEF "Hey Girls Let's Go to School" (2002-07). With respect to learning outcomes, gender differences are similar to those in most OECD countries. In PISA 2015, girls and boys perform at similar levels in mathematics and science but girls outperformed boys by 28 score points in the reading test (OECD, 2016[15]).

Conclusion

To achieve the goal of its Tenth Development Plan of becoming more competitive in the world economy, Turkey is aware that it needs to develop the skills of its young people. This will require a continued effort to expand access to both early childhood education and upper secondary education. More importantly, it will require a significant improvement in the quality of teaching and learning practices at all levels. The following four chapters look at how changes to student assessment policies and practices – and to the curriculum and evaluation frameworks that orient these – can help catalyse this needed transformation. Each chapter also considers how the different elements of evaluation and assessment interact with each other to create synergies to effectively support student learning (Box 1.2).

Box 1.2. OECD Reviews of Evaluation and Assessment in Education

OECD Reviews of Evaluation and Assessment in Education look at how evaluation and assessment policy can be used to improve student outcomes. They assess countries' evaluation and assessment policies and practices for school education, and draw on insights from international practices, to provide actionable recommendations.

The reviews in this series focus on four key components:

- Student assessment monitors and provides feedback on individual student progress and certifies the achievement of learning goals. It covers classroom-based assessments as well as large-scale, external assessments and examinations.
- Teacher appraisal assesses the performance of teachers in providing quality learning for their students.
- School evaluation looks at the effectiveness of schools in providing quality education.
- System evaluation uses educational information to monitor and evaluate the education system against national goals.

This review for Turkey focuses specifically on student assessment, and how the curriculum and evaluation framework – teacher appraisal, school evaluation and system evaluation – supports assessments practices.

The reviews draw on existing OECD work on evaluation and assessment, which included reviews of 14 countries' evaluation and assessment policies and practices (OECD, 2013[28]). Each country review is based on national information, provided by the country to the OECD; background research and country visits. During the country visits, a team of OECD staff and international experts meet with key actors across the education system to identify policy strengths and challenges and discuss the challenges of evaluation and assessment with national actors. The OECD prepares a report for the country which analyses national practices and policies and provides policy recommendations to strengthen evaluation and assessment linked to national goals and priorities.

Source: OECD (2013[28]), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, http://dx.doi.org/10.1787/9789264190658-en.

Notes

[1] The World Bank classification of countries by income groups was used to calculate the average share of upper middle-income countries.

[2] The Student Learning Achievement Monitoring assessment was introduced under the Ministry of National Education's 2023 Education Vision. It is intended to provide schools with diagnostic information on students' strengths and weaknesses in Turkish, mathematics and science. As of mid-2019, some 300.000 students in grades 4, 7 and 10 have participated in the assessment. The Turkish Language Skills Study assesses the competencies of students in four areas: listening, reading, writing and speaking. It has so far been conducted in 15 provinces prior to the nationwide placement exams, providing students with feedback on their Turkish language proficiency and suggestions on areas where they need to improve. The Common Examinations initiative refers to newly introduced joint examinations conducted at the provincial level. The purpose is to provide large-scale, comparable data on student performance as well as information for students themselves to better understand their proficiency gaps. The Ministry of National Education expects that the results obtained from these initiatives will be examined at the school level and used to inform the design of weekend courses to help students address areas of weakness. These initiatives were introduced after the analysis for this review was completed and are therefore not addressed in this report.

[3] The PISA proficiency Level 2 is considered the baseline level of proficiency in mathematics, science and reading to be able to pursue further studies and find employment. All students are expected to reach this level by the end of compulsory education.

[4] Spaull (2017[50]) calculates "access-to-literacy" and "access-to-numeracy" rates. These rates are defined as the proportions of 15-16 year-olds that achieve Level 2 in PISA whether they are in school or have dropped out. The underlying assumption is that students that have left the education system before the age of 15 have not reached the PISA proficiency Level 2 in reading and mathematics.

[5] In PISA, a student's socio-economic status is estimated by the PISA index of economic, social and cultural status (ESCS), which is derived from several variables related to students' family background: parents' education, parents' occupations, a number of home possessions that can be taken as proxies for material wealth, and the number of books and other educational resources available in the home.

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Annex 1.A. Key indicators

Annex Table 1.A.1. Key indicators

#	List of key indicators	Turkey	OECD Countries
Background information			
Economy			
1	GDP per head in USD PPP, 2016[1]	23 469	38 096
2	GDP annual growth rate (%), 2016[1]	3.2	2.3
Society			
3	Population annual growth rate (%), 2016[2]	1.6	0.7
4	Population aged 14 years or less (%), 2016[2]	25	17
5	Fertility rate (%) (children per women aged 15-49 years old), 2015[1]	2.1	1.7
6	*Unemployment rates (%)*		
	Youth unemployment rate (aged 15-24 years old), 2016[1]	19.5	16.7
	Total unemployment rate (aged 15 above), 2016[1]	10.8	7.4
7	Share (%) of adults scoring below or at level 1 in literacy, 2016[3]	45.7	18.9
8	Share (%) of adults scoring below or at level 1 in numeracy, 2016[3]	50.2	22.7
Education indicators			
System			
9	Usual starting age of early childhood education programmes, 2015[4]	4-5	3
10	Starting age of compulsory education, 2015[4]	5-6	6
11	Duration of compulsory education (years), 2015[4]	12	10
Students			
12	Number of years for which at least 90% of children are enrolled, 2015[4]	10	14
13	*Net enrolment rates (%), 2015*		
	Pre-primary education (3-4 year-olds)[4]	21	72
	Primary education (5-14 year-olds)[4]	96	97
	Secondary education (15-19 year-olds)[4]	70	85
14	Tertiary education attainment rate (%) (25-34 year-olds), 2016[4]	30	43
15	Share (%) of students enrolled in vocational programmes for upper secondary education (15-19 year-olds), 2015[4]	30	25
Teachers			
16	*Ratio of students to teaching staff, 2015*		
	Primary education[4]	18	15
	Lower secondary education[4]	17	13
	Upper secondary education[4]	14	13
17	*Share (%) of female teachers, 2014*		
	Pre-primary education[5]	95	97
	Primary education[5]	58	82
	Lower secondary education[5]	53	68
	Upper secondary education[5]	46	58

18	*Ratio of teachers' statutory salaries relative to average earnings of tertiary-educated workers, 2015*		
	Lower secondary education, general programmes[4]	1.17	0.91
	Upper secondary education, general programmes[4]	1.17	0.96
Finance			
19	Total expenditure on primary to tertiary educational institutions as a percentage of GDP[4]	4.9	5.2
20	Total public expenditure on primary education as a percentage of total government expenditure[4]	3.1	3.5
21	Total public expenditure on secondary education as a percentage of total government expenditure[4]	4.7	4.6
22	*Average expenditure per student in USD PPP to GDP, 2014*		
	Primary education[4]	3 589	8 733
	Lower secondary education[4]	2 953	10 235
	Upper secondary education[4]	3 570	10 182
	Tertiary education[4]	8 927	16 143
Student performance			
23	Mean students' performance in science, PISA 2015[6]	425	493
24	Percentage of students below PISA proficiency level 2 in science, PISA 2015[6]	44	21
25	Percentage of variance in science performance explained by student's socio-economic background, PISA 2015[6]	9	13

Sources: 1. OECD (2018[2]), *OECD Statistics*, https://stats.oecd.org/ (accessed on 20 February 2018); 2. World Bank (2016[4]), *World Bank Open Data (Database)*, https://data.worldbank.org/ (accessed on 20 February 2018); 3. OECD (2016[6]), *Skills Matter: Further Results from the Survey of Adult Skills*, http://dx.doi.org/10.1787/9789264258051-en; 4. OECD (2017[9]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en; 5. OECD (2016[37]), *Education at a Glance 2016: OECD Indicators*, http://dx.doi.org/10.1787/eag-2016-en; 6. OECD (2016[15]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

Chapter 2. Promoting national goals for student learning

This chapter looks at how national goals for learning in Turkey influence student assessment practices. In Turkey, while successive curricula reforms have sought to create a more competency-based, student-centred approach to instruction, teachers have not been well-supported to apply these changes in the classrooms. The chapter suggests that developing a national curriculum framework will provide greater coherence and clarity to guide future curricula reforms, while clear learning standards in core subjects will help teachers better understand national expectations for what students are expected to know and be able to do. Finally, it suggests activities to communicate learning goals nationally, so that schools feel trusted and supported when they introduce changes to teaching and learning.

Introduction

The measure of an effective assessment system is the extent to which it promotes student learning and the achievement of national learning goals. For this to occur, learning objectives need to be clear so that educators know what should be assessed and how progress can be measured. In most countries, national learning goals are articulated through the curriculum and/or national learning standards. In addition, the curriculum and standards, and the goals themselves, need to be clearly communicated to national stakeholders so that they can be understood and implemented successfully. Finally, while schools are introducing the desired measures, they must also be properly supported to ensure that they are confident in their practices and that these align with the country's vision for teaching and learning.

Turkey's learning goals focus on the mastery of competencies in order to prepare students to be productive citizens in the 21st century. Teachers are expected to engage in student-centred instruction and use formative assessment techniques to continuously determine and improve student performance. Research and interviews with the OECD review team show, however, that schools do not always focus on developing student competencies, and that student-centred instruction is not always employed in classrooms (Topcu, 2014[1]; Kan, 2017[2]; Kırkgöz, 2008[3]).

This chapter provides recommendations about how Turkey's vision for teaching and learning can be better reflected in the curriculum and learning standards, which would provide teachers and schools with a clearer understanding of what exactly they can do to promote the country's learning goals. Furthermore, this chapter suggests how communication around Turkey's vision can be improved and how schools can be better supported in using the curriculum and standards, which would further help embed and sustain their implementation.

Context and main features

National learning goals

Like many OECD countries, Turkey has changed its student learning goals to focus more on what is most important for student and national success in the 21st century. Over the past decade, Turkey has redefined fundamentally both its expectations of what students should be learning in school, how they should be learning and how their learning should be assessed. This is reflected in legislation and national planning documents for the education sector (see Table 2.2). It is also reflected in the school curriculum, which the government has used as a key lever to effect these changes and to encourage the accompanying transformation in teaching and assessment practices.

Two related theories of teaching and learning have guided Turkey's curriculum reforms. The first is changing from focusing on knowledge-based to competency-based learning outcomes. This change has included a special emphasis on the development of so-called 21st century, transversal competencies. The second is promoting constructivist pedagogical approaches and recognising the active role students play in the learning process. These two new approaches to teaching and learning were first introduced in the landmark curriculum reforms of 2006 (see Chapter 1) and have informed subsequent policies, including the most recent changes to school curricula made in 2017.

Focusing on competency-based learning

Turkey is seeking to reorient its instruction from a relatively narrow focus on the acquisition of academic content knowledge to a more competency-based approach to better prepare students for active participation in 21st century society. This has been informed by the general direction across OECD and European Union countries, and in particular by the European Commission's Recommendation on Key Competencies for Lifelong Learning (European Commission, 2006[4]). Such an approach is more demanding of teachers and learners as it requires not only transmitting knowledge but also acquiring a high degree of understanding of information and concepts so they can be applied in different contexts. Schools and school staff, therefore, must change their practices to support this type of approach to learning.

For teachers in all countries, a competency-based curriculum requires that they exercise greater autonomy with respect to what occurs in their classrooms and how they orient their assessments (Ozturk, 2011[5]). For example, relying solely on simple multiple-choice tests is less effective in assessing student competencies, as this type of method does not easily allow students to demonstrate the deep understanding required to use knowledge in varied contexts. Instead, teachers must select and use a more diverse array of assessment techniques, such as extended essays, student portfolios and presentations, to determine student ability, inform their instruction and orient student learning strategies.

Box 2.1. Competencies

In 1997, the OECD initiated the programme *Definition and Selection of Competencies: Theoretical and Conceptual Foundations* (DeSeCo) to develop theoretical and conceptual foundations for defining and selecting competencies. DeSeCo offered the following definitions to guide the future development of competency-based education (Rychen and Salganik, 2000[6]):

- **Knowledge** is facts or ideas acquired by study, investigation, observation or experience and refers to a body of information that is understood.
- **Skills** are the ability to use one's knowledge with relative ease to perform relatively simple tasks.
- **Competence** is broader than just knowledge and skills. It involves the ability to meet complex demands by drawing on and mobilising resources (including knowledge, skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual's knowledge of language, practical technology skills and attitudes towards those with whom he or she is communicating (OECD, 2005[7]).

The line between knowledge, skill and competency is not always clear. Particularly in colloquial language, the three terms might even be used interchangeably. Nevertheless, the conceptual differences between the terms are real, especially with respect to competency as it is regarded as being more composite and complex than knowledge and skills.

Finally, the conversation around competencies and competency-based education is constantly evolving. The OECD Education 2030 project (http://www.oecd.org/education/2030/), for example, aims to build upon the work of DeSeCo and help countries examine the curriculum changes that will be needed to help students succeed. It, too, stresses that competencies are an integration of knowledge and skills, but suggests that competencies also incorporate attitudes and values (OECD, 2018[8]).

Sources: Rychen, D. and L. Salganik (2000[6]), *Definition and Selection of Key Competencies*, http://deseco.ch/bfs/deseco/en/index/02.parsys.69356.downloadList.26477.DownloadFile.tmp/2000.desecocontrib.inesg.a.pdf; OECD (2005[7]), *The Definition and Selection of Key Competencies - Executive Summary*, https://www.oecd.org/pisa/35070367.pdf; OECD (2018[8]), *Teaching for the Future: Effective Classroom Practices To Transform Education*, http://dx.doi.org/10.1787/9789264293243-en.

Emphasising transversal, 21st century competencies

A particular type of competency, termed 21st century competencies by the OECD and many experts (Ananiadou and Claro, 2009[9]; Voogt and Roblin, 2012[10]; Barron and Darling-Hammond, 2008[11]), was recognised in Turkey's 2006 education reforms and given stronger emphasis in the 2017 reforms. These are competencies and skills that young people in Turkey and around the world need in order to participate fully in 21st century economies. While countries emphasise different types of 21st century competencies, variations of critical thinking, creativity and communication are some of the most common (Ananiadou and Claro, 2009[9]).

An important feature of 21st century competencies is that they are transversal, meaning they are not limited to being taught and developed within a single subject (Voogt and Roblin, 2012[10]). A competency such as creativity, for example, does not typically have a subject dedicated to it but must be reinforced across a range of different subjects ranging from languages to mathematics and arts. Turkish educators across subjects, therefore, must be aligned with respect to their focus on 21st century competencies. Furthermore, materials must be consistent in emphasising 21st century competencies, as well as provide guidance to teachers in how to develop these competencies (see Chapter 3).

Adopting a constructivist pedagogical approach

Constructivism is a pedagogical approach that, in contrast to traditional, behaviourist approaches, suggests that individuals learn by creating understanding for themselves, often in collaboration with others, instead of having facts merely transferred to them (Henson, 2006[12]). For instance, an instructor-centred approach might teach a scientific concept as a piece of knowledge that can be recalled. A constructivist, learner-centred approach might ask a group of students to design and conduct an experiment and then talk to each other about the concept that they observe. In this manner, individuals learn by creating their own understanding and reinforce their understanding by explaining it to others. The focus is on the process of learning, which is guided by inquiry and general questions, as opposed to sequences of factual milestones (Brooks and Brooks, 1999[13]; Seyyedrezaie and Barani, 2013[14]). Table 2.1 illustrates some of the differences between traditional and constructivist classrooms.

Table 2.1. A traditional classroom versus a constructivist classroom

Traditional classroom	Constructivist classroom
Curriculum begins with the parts of the whole Emphasises basic skills	Curriculum emphasises big concepts, beginning with the whole and expanding to include the parts
Strict adherence to fixed curriculum is highly valued	Pursuit of student questions and interests is valued
Materials are primarily textbooks and workbook	Materials include primary sources of material and manipulative materials
Learning is based on repetition	Learning is interactive, building on what the student already knows.
Teachers disseminate information to students; students are recipients of knowledge	Teachers have a dialogue with students, helping students construct their own knowledge
Teacher's role is directive, rooted in authority	Teacher's role is interactive, rooted in negotiation
Assessment is through testing, correct answers	Assessment includes student works, observations, and points of view, as well as tests. Process is as important as product
Knowledge is seen as inert	Knowledge is seen as dynamic, ever-changing with our experiences
Students work primarily alone	Students work primarily in groups

Source: WNET (2004[15]), *Constructivism as a Paradigm for Teaching and Learning*, http://www.thirteen.org/edonline/concept2class/constructivism/.

Challenges in implementation

While the direction of the curriculum reforms is generally regarded as positive, there is considerable evidence that the intended changes have not fully taken effect in Turkish classrooms. National research (Topcu, 2014[1]) and OECD interviews signal that teaching and learning processes remain focused on knowledge memorisation instead of competency development. In addition, while data from the OECD Programme for International Student Assessment (PISA) suggests that teachers are trying to change their classroom practices to engage students more actively in the learning process, there are indications that this is not being done in a way that is fully effective. In particular, teachers report a limited understanding of the types of formative techniques that generate student feedback and enable enquiry-led learning (Chapter 3) (OECD, 2016[16]).

Several factors might explain why the intent of over a decade of curriculum reforms is not well reflected in Turkish classrooms. Teacher capacity (see Chapter 3) and national examinations (see Chapter 4) both influence how and to what extent teachers integrate the curriculum into their own classroom practices. Another reason is that the curriculum itself, which should orient teaching and learning practice, is sometimes unclear and inconsistent with respect to the national learning expectations (see Policy issue 2.1).

The curriculum could more clearly support a constructivist approach

Teachers and education officials who met with the OECD review team explained that many educators are unsure what is meant by a constructivist pedagogical approach, reflecting the fact that it is not explicitly explained in curriculum documentation. An analysis of the English language curricula for Grades 2 to 8 and 9 to 12 carried out as part of this review found that, while constructivist principles were mentioned, such as authentic assessment and project-based learning, these were not explicitly linked to a constructivist approach. In fact, the word “constructivism” does not appear in either grade-level English curriculum. Not explicitly mentioning constructivism likely exacerbates educators’ confusion around the definition of constructivism and what it entails for their practices.

Furthermore, there are some discrepancies within the curriculum related to how it supports the national learning goals. Although the curriculum generally encourages competency-based learning and constructivist pedagogy, some elements still focus heavily on the acquisition of discrete knowledge and behaviourist pedagogy. For instance, one outcome from the 2017 Grade 9 English curriculum reads: "Students will be able to scan a text for specific information". While the outcome itself expects students to perform a task, the expected task is very narrowly defined and assessment of this outcome would not allow students to demonstrate greater mastery of English. An outcome more closely aligned with competency-based learning and a constructivist approach might expect students to decide for themselves what the most important parts of the text are and justify why those pieces are the most critical.

Curricula are divided into domains and levels

Turkey's curricula for general education (Anatolian schools) are divided into domains (e.g. mathematics or science) and then into levels (e.g. Grades 1 through 5 or Grades 9 through 12). This type of configuration is useful for creating contextually relevant education, but it risks generating systematic incoherence in which each curriculum loses sight of national, common learning goals. In this case, what occurs in classrooms, drawn from different curricula materials, might be different from what is envisioned because there is no single curriculum framework that consistently communicates what the intended, national learning expectations are.

This can also make it more difficult to ensure that a coherent vision and direction underpins successive curriculum reforms. In Turkey, curriculum reform has been ongoing since 2006. While these revisions have aimed to simplify and clarify the curriculum, particularly the 2017 revisions, the absence of a unifying curriculum framework can make it difficult to ensure that the reforms follow a consistent direction. Furthermore, many general directorates are involved in the development of the curriculum. While the Board of Education co-ordinates these efforts and authorises the final curriculum, because there is not an overall curriculum framework, it does not have the means to ensure consistency across all subject curricula.

Curricula need clearer learning standards

Turkish curricula have well-defined learning outcomes and what an annual plan developed by a committee of subject teachers at the beginning of the academic year. However, outcomes are not the same as standards. Learning standards are definitions of what a student should know and/or be able to do to be considered competent in a domain or a field. They also act as measures and benchmarks and can, therefore, be used to assess if what was intended to be learned through the curriculum has actually been learned by students (CEPPE, Chile, 2013[17]). Standards can aid teachers' pedagogy as they can help teachers visualise what the results of their instruction should be, leading to more accurate assessment, better-informed instruction and, ultimately, improved student learning. While standards share similarities with outcomes, there are notable differences between them, in particular with respect to orienting classroom assessments (Box 2.2).

Box 2.2. Learning outcomes and standards

Outcomes refer to expectations of student performance as they relate to a unit or lesson. While consistent in the curriculum, they might change at the classroom-level as teachers develop lesson plans that are adapted for their students. Standards, on the other hand, represent expectations of student performance at a higher level, such as at the end of each grade or at the conclusion of a level schooling (e.g. primary or upper secondary). They do not change across classrooms and are uniformly applicable to all relevant students. Resources from the New Zealand education system help illustrate this difference.

A unit plan from the mathematics domain for upper primary students is about shopping for a car (New Zealand Ministry of Education, 2017[18]). It lists five learning outcomes.

Students will be able to:

- Identify costs associated with purchasing a car.
- Research, analyse and evaluate different car prices, insurance options, and on road costs.
- Present information regarding these car choices and discuss the decision they made.
- Operate within a budget.
- Evaluate the success of the task.

These outcomes are specifically written for a unit about car shopping and would not be applicable to other units. Nevertheless, these outcomes might read slightly differently in an environment in which cars are not available. The teacher might adapt the unit such that students are asked to shop for motorcycles or bicycles, which would require modification of the outcomes.

Compare these outcomes to the associated New Zealand mathematics standards at the end of this same level of education. In contexts that require them to solve problems or model situations, students will be able to:

- Apply additive and multiplicative strategies flexibly to whole numbers, ratios, and equivalent fractions (including percentages).
- Apply additive strategies to decimals.
- Balance positive and negative amounts.
- Find and represent relationships in spatial and number patterns, using tables and graphs as well as apply general rules for linear relationships.

Unlike the learning outcomes from the car shopping unit, these standards represent more general expectations of student capabilities. Not only the car shopping unit, but all other units taught in mathematics classes would be expected to develop student capacity in alignment with this standard.

Assessing these learning standards would be broader in scope than assessing the outcomes of the car shopping lesson. For example, with respect to assessing the standards, students would have to demonstrate a strong understanding of balancing negative and positive amounts and be able to use that knowledge in several different contexts. With respect to assessing the outcomes, however, students would only have to compare and evaluate the prices of different vehicles from the lesson.

Source: New Zealand Ministry of Education (2017[18]), *The New Zealand Curriculum Online*, http://nzcurriculum.tki.org.nz/Curriculum-resources/Financial-capability/Resources-for-teachers/Planning.

Without clearly defined national learning standards, Turkish educators lack criteria against which to formatively assess their students and improve their instruction of those students. Additionally, because learning standards are linked to the competencies expressed in the curriculum, they act as another tool to help align classroom activities with national learning goals. In the absence of clear learning standards, aligning what occurs in classrooms with what the government intends becomes more challenging.

Parents pay considerable attention to students' performance in national examinations

From an international perspective, one of the main obstacles in changing learning goals and practices is system inertia (Bialik and Fadel, 2017[19]). Often, teachers and schools are not convinced by the rationale for change, do not realise that the change required is quite profound as opposed to surface-level and are not confident that new approaches will be effective or are applicable to them. All of these conditions can prevent change from being realised. With respect to curriculum reform, one of the biggest challenges that many countries encounter is the ingrained, societal emphasis on examinations results (Dello-Iacovo, 2009[20]; Berry, 2011[21]). Teachers and schools feel pressured to focus their attention on these, rather than promoting the learning goals and approaches of the curriculum.

In Turkey, many families attach considerable importance to achieving a high mark on national examinations. In the past, many students attended private tutoring, foregoing social, cultural and family activities (Karabacak, 2013[22]). Teachers also told the OECD review team that they feel pressured by families to help students succeed on the examinations instead of continuing to follow the curriculum. More national policies could be developed to build support among parents and society for the new approach to learning and help change these expectations which can contribute to system inertia.

Preparing Turkish society to embrace broad changes in learning outcomes, such as those envisioned by the curriculum, will require a considerable investment of resources and outreach. MoNE, as part of the Vision 2023, currently runs a media campaign to inform the society of the new initiatives to improve the learning outcomes. In other countries, resources have been invested in creating media campaigns to make more visible the desired changes and establishing national education days that showcase successfully realised changes at the school level. These initiatives have helped to overcome system inertia and facilitate a change in the approach to teaching and learning.

Policy issues

After over a decade of reform, the learning goals in Turkey's curriculum are still not fully reflected in the country's classrooms. The review team's interviews with teachers and policymakers revealed that a key concern nationally is that many teachers do not fully understand the implications of a competency-based education and constructivist pedagogy for their classroom practice, which is holding back improvement in teaching, learning and assessment practices. To help embed the curriculum's vision for learning into schools, this review makes recommendations for how the curriculum can communicate its learning goals more effectively. This is essential for reliable and valid assessment practices because it shapes the learning outcomes that teachers aim to measure via assessment. First, a curriculum framework should be developed to provide a single and overarching explanation of the country's learning goals which can guide future curriculum revisions, in particular, to ensure coherence across domain curricula. Another immediate priority, to

support the implementation of the 2017 curriculum, will be developing learning standards to help teachers understand what students are expected to know and be able to do, which will inform their assessment practice. Finally, national communication and support will be critical to ensure that the profound change in the teaching and learning envisaged by the curriculum reach Turkey's schools and society in general.

Policy issue 2.1. Developing a curriculum framework to give greater coherence and clarity to national learning goals

A lack of understanding of the curriculum is one factor in Turkey that is holding back schools and teachers from adopting a more competency-based, student-centred approach to learning and assessment. While greater support and training will help educators to better understand national learning goals, the curriculum itself can also be more clearly articulated.

The OECD review team was told that multiple revisions of the curriculum over the last decade have made its rationale difficult to determine. Moreover, while involving individual agencies in curricula development means that they can contribute their specific competency in the domain or level of education, it also risks creating misalignment across domain-level curricula. It is therefore important to make more explicit and understandable the vision of teaching and learning that underpins the curricula. This would help educators develop more effective teaching and assessment practices and help designers of subject curricula ensure that these are coherent with each other and national learning objectives. Students would then undergo a more cohesive educational experience, ultimately leading to improved learning outcomes.

Recommendation 2.1.1. Develop a unifying national curriculum framework

One way to improve the clarity of curricula is by creating a unifying national curriculum framework to accompany subject-level curricula, in which the learning goals of the Turkish education system are explicitly identified and the principles that guide instruction are carefully explained (International Bureau of Education, 2013[23]). A curriculum framework is a single document that applies to all types and levels of education and unites subsidiary curriculum materials around common objectives (Box 2.3). It is generally used across different countries to serve two purposes:

1. Identify and explain learning goals as they relate to the future of the country.
2. Direct the technical development of other curriculum documents, such as materials for individual domains.

In the Turkish context, developing a curriculum framework to accompany existing curricula would be particularly helpful in explaining the learning vision for the country, especially with respect to the constructivist approach to teaching and assessment. This vision, and the aims and principles that underpin it, can then be incorporated into future revisions of domain-level curricula, which would act as primary education resources for schools and educators. Within the scope of MoNE's Education Vision 2023, MoNE bean to update the school curricula to ensure consistency across different subjects and levels Furthermore, because the new reforms have placed particular emphasis on developing 21st century competencies, a curriculum framework can help all teachers understand what these competencies are and how they can be integrated into their teaching and assessment.

Box 2.3. Curriculum frameworks

The table below provides broad guidelines about what is usually found in a national curriculum framework.

Element	Description
1. Introduction: Current context	Describes the social and economic environment in which teaching and learning occur.
2. Educational policy statements	Describes the government's goals for education, such as universal literacy and numeracy, the development of skills needed for economic development and the creation of a stable and tolerant society.
3. Statement of broad learning objectives and outcomes/standards for each level/cycle	Describes what students should know and be able to achieve when they complete their school education. Outcomes should be expressed through a range of domains, including knowledge, understanding, skills and competency.
4. Structure of the education system	Describes the school system within which the curriculum framework is to be applied. It should specify: ● Number of years of schooling, including compulsory schooling. ● Stages (or cycles) of schooling and their duration. ● Number of weeks in the school year and teaching hours in the school week.
5. Structure of curriculum content, learning areas and subjects	Describes the organisation of content within the framework and the extent to which schools and students can make choices. It might describe: ● An outline of subjects or learning areas to be studied in each stage or cycle (such as core, elective and optional subjects). ● A brief description of each subject or learning area, outlining the rationale for its inclusion in the curriculum and the contribution it makes to the achievement of the learning outcomes defined in Section 3. ● The number of hours to be assigned to each subject or learning area in each stage or cycle.
6. Standards of resources required for implementation	Describes standards as they apply to: ● Teachers – qualifications, teaching load (number of classes per week). ● Students – number per class in each subject. ● Materials – textbooks, computers, other equipment, facilities – classrooms, furniture, supplies.
7. Teaching methodology	Describes the range of teaching approaches that might be employed in the implementation of the framework.
8. Assessing student achievement	Describes the importance of assessing the extent to which students achieve the outcomes of each subject and recommends or prescribes modes of assessment (such as written or oral examinations, performance and practical-skill demonstrations).

Examples of curriculum frameworks from around the world can be found through the links below.

- Australia: http://www.australiancurriculum.edu.au/
- Finland: http://www.oph.fi/english/curricula_and_qualifications/
- Singapore: http://www.moe.gov.sg/education/

Source: International Bureau of Education (2013[23]), *Training Tools for Curriculum Development: A Resource Pack; 2014*, http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Training_tools/IBE-CRP-2014_eng.pdf.

Articulate the overall learning goals in a vision statement

A country's vision statement expresses, in broad terms, what the results of a successful education system might look like (International Bureau of Education, 2013[23]). Creating a vision statement is important because it acts as a consistent guide for the development and use of educational content, pedagogy and assessment practices (Donaldson, 2015[24]). Without a coherent vision statement, subsequent curriculum materials and educational and assessment activities will not share a common point of reference and risk falling out of alignment with each other, thus negatively impacting student learning. Several countries around the world have developed such vision statements with the aim of guiding and aligning their education systems (Box 2.4).

Box 2.4. Examples of learner-centred vision statements

Singapore

The person who is schooled in the Singapore Education system embodies the Desired Outcomes of Education. He has a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future. He is responsible for his family, community and nation. He appreciates the beauty of the world around him, possesses a healthy mind and body, and has a zest for life. In sum, he is:

- a confident person who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically, and communicates effectively
- a self-directed learner who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning
- an active contributor who is able to work effectively in teams, exercises initiative, takes calculated risks, is innovative and strives for excellence
- a concerned citizen who is rooted to Singapore has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around him.

Source: Ministry of Education, Singapore (2009[25]), *Desired Outcomes of Education*, https://www.moe.gov.sg/education/education-system/desired-outcomes-of-education.

Wales

All our children and young people will be…

- ambitious, capable learners who are ready to learn throughout their lives
- enterprising, creative contributors who are ready to play a full part in life and work
- ethical, informed citizens who are ready to be citizens of the world
- healthy, confident individuals who are ready to lead fulfilling lives as valued members of society.

Source: Welsh Government (2015[26]), *A Curriculum for Wales: A Curriculum for Life*, http://gov.wales/docs/dcells/publications/151021-a-curriculum-for-wales-a-curriculum-for-life-en.pdf.

New Zealand

Our vision is for young people:

- who will be creative, energetic, and enterprising
- who will seize the opportunities offered by new knowledge and technologies to secure a sustainable social, cultural, economic, and environmental future for our country
- who will work to create an Aotearoa New Zealand in which Māori and Pākehā recognise each other as full Treaty partners, and in which all cultures are valued for the contributions they bring
- who, in their school years, will continue to develop the values, knowledge, and competencies that will enable them to live full and satisfying lives
- who will be confident, connected, actively involved, and lifelong learners.

Source: New Zealand Ministry of Education (2007[27]), *The New Zealand Curriculum*, http://nzcurriculum.tki.org.nz/content/download/1108/11989/file/The-New-Zealand-Curriculum.pdf.

Turkey does not have a single vision statement but instead relies on a variety of national documents to broadly define the goals of its education system. For example, national legislation, the Tenth Development Plan (2014-18) and the Ministry of National Education's (MoNE) Strategic Plan (2015-19) all contain references to the learning goals of the country (Table 2.2).

Table 2.2. Broad education goals expressed by different national documents

Document	Content
National Legislation (Basic Law of National Education)	The general objective of the Turkish National Education is to train all members of the Turkish Nation as citizens who […] endorse, protect and develop the national, moral, humanitarian, spiritual and cultural values of the nation […] balanced and [have a] healthy manner physically, mentally, ethically, spiritually and emotionally […] have a wide perspective of the world, respect human rights, value individuality and entrepreneurship and feel responsible towards the society; and who are constructive, creative and industrious […] enable them to gain the knowledge, skills and attitudes necessary for their future lives and for the acquisition of a profession which would ensure their prosperity and continue to that of the country […].
Development Plan (2014–18)	The main goal of the education system is to raise happy and productive individuals who have advanced thinking, perception and problem-solving skills; have a sense of self-confidence, responsibility, entrepreneurship and innovation; have internalised democratic and national values; have a strong sense of arts and aesthetics; are open to communion and communication; are capable of using and developing technology and are equipped with the qualifications necessitated by the information society.
MoNE Strategic Plan (2015–19)	To improve critical thinking, reading comprehension, research and problem solving skills; to provide the necessary information and skills as required by knowledge-based society; To internalise universal values of democracy and humanity within the national culture; to be able to establish open communication and to improve students' sensitivity and artistic skills; to bring up children who are diligent, creative, innovative, peaceful, healthy and happy; to raise consciousness about self-confidence, self-respect, rights, fairness and responsibilities.

Sources: (MoNE, 1973[28]), *Turkish Basic Law of National Education*; Ministry of Development (2014[29]), *Tenth Development Plan*; (MoNE, 2015[30]), *Strategic Plan 2015-19*.

While there are common priorities expressed by all three documents, for those who are responsible for developing and interpreting curricula, it is difficult to determine which goals should be prioritised.

Crafting a vision statement would unify and make more visible the common expectations that underpin the documents from Table 2.2. Such a statement would co-ordinate subsequent policymaking and curriculum development, ultimately making objectives clearer for teachers and education more cohesive for Turkish students.

To begin creating a vision statement in Turkey, the content from the three national documents could be distilled into four common learning goals, as shown in Table 2.3. These four goals, which represent Turkey's vision for learning, could then be represented in the vision statement that Turkey crafts for its national curriculum framework. The full process of creating the vision statement could be led by senior leadership from the MoNE, with direct input from the minister in order to create cohesion across educational bodies.

Table 2.3. Common learning goals found in national documents

Goal	National Legislation (Basic Law of National Education)	Development Plan (2014–18)	MoNE Strategic Plan (2015-19)
Well-being	● Healthy manner physically, mentally, ethically, spiritually and emotionally	● Raise up happy and productive individuals	● Healthy and happy ● Raise consciousness about self-confidence, self-respect
Economic competitiveness	● Enable them to gain the knowledge, skills and attitudes necessary for their future lives and for the acquisition of a profession	● Equipped with the qualifications necessitated by the information society	● To provide the necessary information and skills as required by knowledge-based society
Culture and citizenship	● Protect and develop the national, normal, humanitarian, spiritual and cultural values of the nation ● Respect human rights ● Feel responsible towards society	● Internalised democratic and national values	● Internalise universal values of democracy and humanity within the national culture ● Rights, fairness and responsibilities
21st century competencies	● A wide perspective of the world ● Value entrepreneurship ● Creative	● Problem-solving skills ● Entrepreneurship and innovation ● Open to communion and communication ● Capable of using and developing technology	● Improve critical thinking, research and problem-solving skills ● Creative, innovative, peaceful

Sources: Turkey Ministry of National Education (MoNE, 1973[28]), *Turkey Basic Law of National Education*; Turkey Ministry of Development (2014[29]), *Tenth Development Plan*; Turkey Ministry of National Education (2015[30]), *Strategic Plan 2015-19.*

The aims of the vision statement would consequently be reflected throughout the education system, from domain-specific curricula to classroom activities including assessments, and educational materials. It would be the anchor that aligns the standards for teacher and school evaluation, to ensure that expectations for teachers and schools encourage the type of teaching and learning students would need to experience to develop in this manner. In particular, the vision statement would direct the construction of learning standards, which would then be used to assess students, thus ensuring that all elements of the system are reinforcing the same learning objectives (see Policy issue 2.2) (OECD, 2013[31]).

Describe the differences between competency-based and knowledge-based teaching and learning

Simply changing the language of the curriculum to be more competency-based is not enough to foster understanding of competency-based learning. In the curriculum framework, it would be helpful to also explain the differences between focusing on what students *know* (knowledge-based) and what they *can do* with what they know (competency-based).

Importantly, the explanation of competency-based learning should not only define how it is different from knowledge-based learning, but also describe how these differences would be manifested in school classrooms, particularly in student assessment. Teachers must devise complex assessment tools, including more sophisticated multiple-choice instruments and authentic assessment methods (e.g. student portfolios) (OECD, 2013[31]). Since the curriculum framework is a high-level document, a detailed discussion about classroom activities and assessments can be reserved for individual domain curricula (see Recommendation 2.1.2 and Chapter 3). What is important in the curriculum framework is to ensure that educators and policymakers understand, in general terms, that the change in curriculum will require a change in what occurs in Turkish classrooms.

In addition, it is vital to justify why the changes are occurring. For example, the curriculum framework's explanation of competency-based learning should include a justification of why Turkey decided to focus on developing students' competencies. Educators need to understand that modern economies place less value on factual recollection and that they must prepare students for a world in which they can demonstrate not just what they know, but above all what they can do with what they know (Schleicher, 2015[32]). Without understanding the rationale for change, educators might not be convinced of its merit and would be more hesitant to adapt their practices (Fullan, 1992[33]).

Define and promote transversal, 21st century competencies

Since 2006, Turkey's curriculum has included 21st century competencies as an expected learning outcome and the 2017 reform has given these even more prominence. However, evidence collected by the OECD review team suggests that many teachers do not fully understand what is meant by 21st century competencies, which therefore makes it difficult for them to assess these competencies. In interviews with officials and teachers, for example, the OECD review team asked individuals to define 21st century competencies and received different responses from different stakeholders. Moreover, even if clearly understood, 21st century competencies are difficult to assess because they are transversal and not limited to a single domain or class.

To better define and promote 21st century competencies, it is recommended that the curriculum framework provide an explanation of what is meant by 21st century competencies and a list of the most important competencies in the Turkish context.

Furthermore, the curriculum framework would explain clearly and explicitly that the development of 21st century competencies is the responsibility of all teachers, not just teachers from one or two domains. This would establish the expectation that all teachers would incorporate the development of these competencies into their classroom activities and assess their students against these competencies (Ontario Public Service, 2016[34]). This is the practice in most OECD countries, where the promotion of 21st century competencies is integrated regular classroom teaching and assessment (Ananiadou and Claro, 2009[9]).

Explain constructivist pedagogy and provide examples of its usage

Given that many educators and policymakers in Turkey are not clear about what is meant by constructivist pedagogy, it would be beneficial to explain the theories that underpin constructivist pedagogy in the curriculum framework. Examples should also be provided of how this approach differs from traditional, behaviourist approaches. These explanations can help ensure that all stakeholders will have the same understanding of constructivism and that subsequent curriculum materials reflect a constructivist approach.

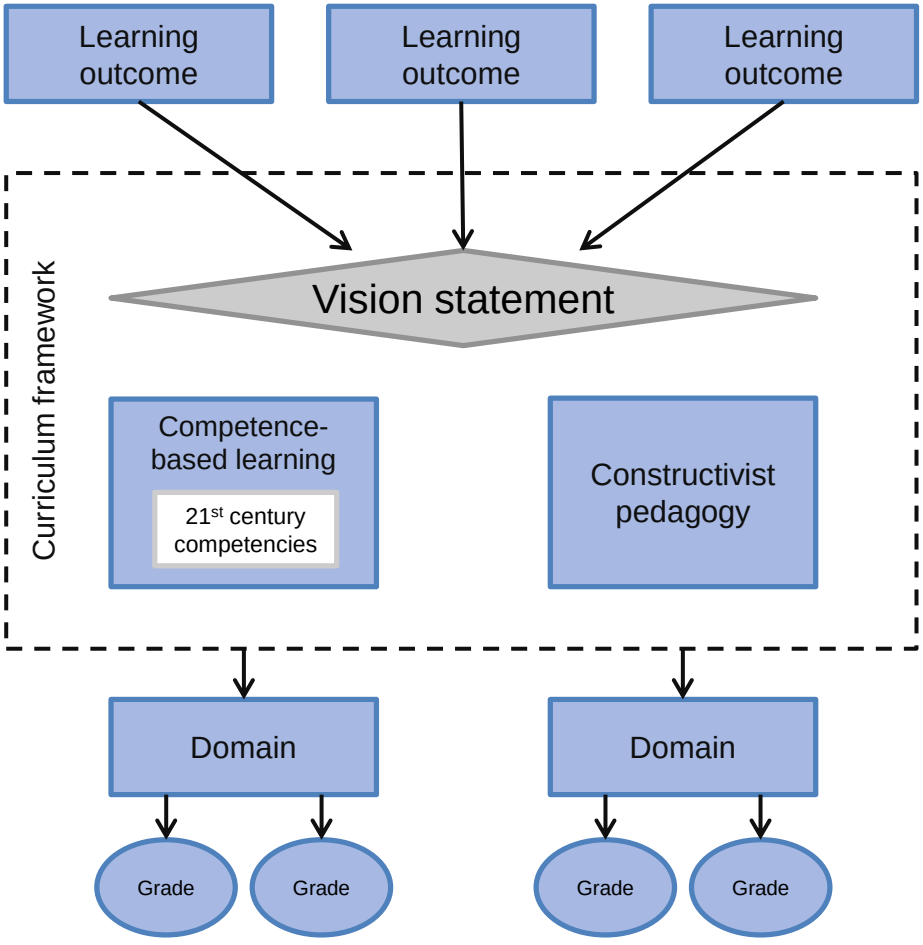
In order to encourage teachers to use constructivist approaches in their own practice, it is important to justify why Turkey decided to move away from a behaviourist, teacher-centred approach and towards a constructivist, learner-centred approach to education. With Turkey's emphasis on transversal, 21st century competencies, teachers' pedagogical approaches should be aligned to better develop students' abilities in these areas. Research shows that traditional, behaviourist approaches are not well suited to developing critical thinking and higher-order skills (Barron and Darling-Hammond, 2008[11]). On the other hand, constructivist approaches, such as inquiry-based teaching and formative assessment techniques, can produce better student outcomes with respect to deeper learning and performing complex tasks (Barron and Darling-Hammond, 2008[11]).

Recommendation 2.1.2. Use the curriculum framework to guide future revisions of individual domain curricula

Turkey's reform efforts have significantly improved the curriculum; nevertheless, further progress can be made, especially alignment between subject-level curricula. Although the Board of Education is responsible for creating coherence across curricula because the individual general directorates develop subject- and grade-level curricula, it can be difficult for the board to ensure this coherence. Given these circumstances, it is difficult to ensure consistency across different subjects and levels and consistently promote the same vision and approach to learning. Teachers can then find it difficult to support student progression and students might receive a less coherent learning experience.

Therefore, after the national curriculum framework has been created, it is recommended that Turkey use this to direct the future development of individual curricula and materials such as textbooks and assessments. Figure 2.1 illustrates the content of the national curriculum framework and summarises the relationship between national goals, the curriculum framework and subject-level curricula.

Figure 2.1. Relationship between national outcomes, curriculum framework and domain-level curricula



Source: Authors based on International Bureau of Education (2013[23]), *Training Tools for Curriculum Development: A Resource Pack; 2014*, http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Training_tools/IBE-CRP-2014_eng.pdf.

Ensure that overall goals are well-represented in future domain-level curricula objectives

The overall goals expressed in the curriculum framework should be represented in all subsequent revisions of curriculum materials. Currently, this alignment is not always occurring. For example, a comparison of the objectives of mathematics and English curricula reveals that the common national education goals found in Table 2.3 are not consistently reflected in these subject-level curricula (MoNE, 2017[35]). In the 2017 English curriculum for Grades 2 to 8, a list of "key competencies" of the curriculum is found. The competencies include four aptitudes identified as "horizontal skills." These are:

- Learning to learn.
- Social and civic responsibility.
- Initiative and entrepreneurship.
- Cultural awareness and creativity.

Looking at Table 2.3, these competencies would most likely represent culture and citizenship and 21st century competencies. That they are explicitly called "horizontal" indicates awareness that these competencies are transversal in nature.

In the 2017 English curriculum for Grades 9 to 12, no section about key competencies appears, nor does a list of horizontal skills. However, the objectives of the curriculum do emphasise collaboration and learner autonomy, which could be classified as different 21st century competencies that appear in the English curriculum for Grades 2 to 8.

The 2017 mathematics curriculum for Grades 1 to 5 is organised differently. It contains a section about the programme's vision and another about the programme's perspective, without an explicit list of key competencies to be acquired. Within the sections about vision and perspective, the curriculum does mention competencies such as problem solving and communication.

Comparing the content of these three domain-level curricula reveals inconsistency within and across domains regarding the integration of Turkey's overall educational goals. While 21st century competencies, albeit different ones, are represented in all three curricula, culture and citizenship are only represented in one. Well-being and economic competitiveness were not explicitly identified in any of the three curricula.

This inconsistency risks that teachers' assessment practices might be misaligned with each other and with national learning goals. How teachers teach and assess students, for instance, might be different between a student's mathematics and science classes. This is particularly important for the development of 21st century competencies, as they require reinforcement in all domains.

To improve alignment across different curricula, the Board of Education should require those responsible for developing the curricula to organise each similarly, with a section dedicated to explicitly listing the competencies that are expected to be acquired in the context of a particular domain. These competencies would reflect the national learning expectations expressed in the curriculum framework. This type of organisation is exemplified by the national curricula of Australia and New Zealand and is designed to improve the consistency of the education that student's receive (Australian Curriculum, n.d.[36]; New Zealand Ministry of Education, 2007[27]).

Give stronger emphasis to competency-based learning in future domain-level curricula

While Turkey has modified its curriculum to be more competency-based, some parts are still focused on the acquisition of knowledge and linear progression through content areas. The 2017 English curriculum for Grades 2 to 8 provides an example of this discrepancy. It is organised according to ten broad themes/units about common environments and situations (e.g. "friendship" and the "Internet"). Each theme is associated with "functions and useful language" (recommended words and phrases to be used in context), learning outcomes and suggested tasks. Figure 2.2 shows an excerpt from the Internet theme in Grade 8. Outcomes are categorised into five skills areas: listening, spoken interaction, spoken production, reading and writing. One outcome for the spoken interaction skill is: "Students will be able to talk about their Internet habits". This outcome represents competency-based learning because it does not expect students to recall predetermined words or phrases. Rather, it asks students to use what they have learned and apply it in a common life situation.

Figure 2.2. Excerpt from the Annual Plan for 2017 Grade 8 English curriculum

8. SINIF / 8th GRADE

Unit / Theme	Functions & Useful Language	Language Skills and Learning Outcomes	Suggested Contexts, Tasks and Assignments
5 The Internet	**Accepting and refusing / Making excuses** Would you like to join our WhatsApp group? —Yes, sure/That sounds great. —No, thanks. I am really busy. Why don't we chat online at two o'clock? I want to tell you something important. —I'm sorry, but I can't. My internet is broken. What do you mean? Do you mean the Internet connection? —Yes. It isn't working properly. account, -s attachment, -s browse browser, -s comment, -s confirm connection, -s delete download/upload log on/in/off register reply screen, -s search engine, -s sign in/up social networking site, -s website	**Listening** **E8.5.L1.** Students will be able to understand the gist of oral texts. **E8.5.L2.** Students will be able to comprehend phrases and related vocabulary items. **Spoken Interaction** **E8.5.SI1.** Students will be able to talk about their Internet habits. **E8.5.SI2.** Students will be able to exchange information about the Internet. **Spoken Production** **E8.5.SP1.** Students will be able to make excuses, and to accept and refuse offers by using a series of phrases and simple sentences. **Reading** **E8.5.R1.** Students will be able to identify main ideas in short and simple texts about internet habits. **E8.5.R2.** Students will be able to find specific information about the Internet in various texts. **Writing** **E8.5.W1.** Students will be able to write a basic paragraph to describe their internet habits.	**Contexts** Blogs Charts Diaries/Journal Entries E-mails Illustrations Lists News Reports Notes and Messages Podcasts Posters Questionnaires Songs Stories Videos Websites **Tasks/Activities** Drama (Role Play, Simulation, Pantomime) Find Someone Who … Games Guessing Information/Opinion Gap Information Transfer Labeling Matching Questions and Answers Reordering Storytelling True/False/No information **Assignments** • Students keep expanding their visual dictionary by including new vocabulary items. • Students prepare a poster to illustrate their internet habits and hang it on the classroom walls.

Source: MoNE (2017[371]), *English Curriculum Teaching Program: Grades 2 to 8*.

In contrast, the sole learning outcome for the spoken production skill is: "Students will be able to make excuses, and to accept and refuse offers by using a series of phrases and simple sentences". In addition to being less related to the unit itself, this outcome is more rigidly defined than the previous one. The language used to describe this outcome might encourage some teachers to interpret the outcome's intent as expecting students to understand a list of specific excuses and then demonstrate their learning by simply repeating those excuses. Such practice would be more representative of knowledge-based learning.

Furthermore, the annual plans (i.e. expected student outcomes at specific moments during the school year) that are associated with the curricula have been created and provided to teachers to help them implement the curricula. An example of the annual plan associated with the Internet theme of the Grade 8 English curriculum is shown in Figure 2.3. The plan reiterates the same learning outcomes found in the curricula, but accompany those outcomes with the month and week in which those outcomes should be achieved in class. Even the number of hours that should be allocated to each unit is provided. Such a strict and linear progression through the curriculum is prescriptive in nature and aligns more closely with traditional, knowledge-based learning than the type of competency-based learning that Turkey is promoting. The linear progression also makes it harder for teachers to introduce more student-centred pedagogical approaches, such as formative assessment, as teachers feel pressured to follow these specifications rather than adapt to the learning levels and pace of their students. This challenge was highlighted frequently by teachers during the review team's interviews.

Figure 2.3. Annual plan (2016-17) developed for the Internet theme of the Grade 8 English curriculum

UNIT 5 THE INTERNET				
DECEMBER	4th (26-30.12.2016)	4	Accepting and refusing Giving explanations/reasons Making excuses Making simple requests Making simple inquiries Talking about plans Telling the time, days and dates	**Listening** • Students will be able to understand the gist and comprehend phrases and the highest frequency vocabulary related to the topic 'Internet' provided speech is clearly and slowly articulated. **Spoken Interaction** • Students will be able to communicate during simple tasks requiring a simple and direct exchange of information about their Internet habits. **Spoken Production** • Students will be able to make excuses, accept and refuse offers by using a series of phrases and simple sentences. **Reading** • Students will be able to identify main ideas in very short, simple texts about internet habits. • Students will be able to find specific, predictable information in simple materials such as news reports and brochures related to the topic 'Internet'. **Writing** • Students will be able to write a basic paragraph to describe and explain their Internet habits by using simple connectors like 'and', 'but' and 'because'. • Students will be able to inquire about others' plans and respond to simple inquires and requests. **Compensation Strategies** • Students will be able to answer follow-up questions if asked for clarification. • Students will be able to express themselves by using several words to convey the intended meaning when they can't think of a word or expression
JANUARY	1st ,2nd &3rd (02 – 20.01.2017)	12		

Source: MoNE (2017[35]), *Gains Table - English 8th Grade*.

To improve alignment between Turkey's learning expectations and classroom activities, it is recommended that future revisions of domain-level curricula reflect more strongly the competency-based learning focus that is expressed in the national curriculum framework. The aforementioned spoken production outcome, for example, could be modified to read: "Students will be able to verbally consider different offers related to the Internet and then refuse or accept the offers based upon his/her deliberations". The annual plans or "gains" tables should be less prescriptive (e.g. not mandate a certain number of hours per lesson) and instead guide teachers in facilitating student progress towards learning outcomes. Alternatively, they could also be integrated into a set of learning standards that would describe the progression that teachers should expect to see in students as they become stronger in their competencies (see Policy issue 2.2).

Box 2.5. Alignment across curricula, an example from Singapore

Like Turkey, Singapore also disaggregates its curricula by domain and grade level. The common organisation of Singapore's curricula across domains serves as an example of how Turkey might similarly organise their domain- and grade-level curricula. In Singapore's primary school mathematics and science curricula (Ministry of Education Singapore, 2018[38]), both documents have an explicit section for the learning goals of the curriculum. The goals of the primary school mathematics curriculum are:

- Acquire mathematical concepts and skills for everyday use and continuous learning in mathematics.
- Develop thinking, reasoning, communication, application and metacognitive skills through a mathematical approach to problem-solving.
- Build confidence and foster interest in mathematics.

The goals of the primary school science curriculum are:

- Provide students with experiences which build on their interest in and stimulate their curiosity about the environment.
- Provide students with basic scientific terms and concepts to help them understand themselves and the world around them.
- Provide students with opportunities to develop skills, habits of mind and attitudes necessary for scientific inquiry.
- Prepare students towards using scientific knowledge and methods in making personal decisions.
- Help students appreciate how science influences people and the environment.

In addition to being structured similarly around goals, the goals themselves of these two curricula demonstrate alignment. Although oriented towards mathematics or science, both sets of goals emphasise skills development (competencies) and strengthening students' confidence, curiosity and inquiry (student-centred pedagogy).

Further examination of these curricula reveals that they both focus on developing similar, transversal competencies. In both curricula, 21st century competencies are explicitly described and their development strongly encouraged. The mathematics curriculum states:

> *"The learning of mathematics also provides an excellent vehicle to train the mind, and to develop the capacity to think logically, abstractly, critically and creatively. These are important 21st century competencies that we must imbue in our students, so they can lead a productive life and be life-long learners."*

The science curriculum similarly explains:

> *"A strong foundation in scientific knowledge and methodologies will include the development of reasoning and analytical skills, decision and problem-solving skills, flexibility to respond to different contexts and possessing an open and inquiring mind that is willing to explore new territories and learn new things. These are skills and habits of mind that are aligned to the desired 21st century competencies."*

By constructing their domain-level curricula in such a similar manner, Singapore ensures that they are aligned and consistent with respect to their goals and on common, transversal competencies.

Source: Singapore Ministry of Education (2018[38]), *Singapore Curriculum*, https://www.moe.gov.sg/education/syllabuses/sciences/.

Align future domain-level curricula with constructivist approaches

In addition to reflecting the national focus on competency-based learning, future domain-level curriculum revisions should also be more explicit about how teachers can teach the curriculum content using constructivist methods. As many teachers are experienced with the idea of teaching as a transmission of information, it is important to embed the constructivist approach in all elements of the curriculum (e.g. outcomes, tasks and activities) in order to continuously expose teachers to this new approach and steer them away from more habitual practices. In some cases, however, current curricula do not explicitly promote constructivist pedagogies.

For example, looking again at the "Internet" theme of the Grade 8 English curriculum (Figure 2.2), the tasks and activities that are recommended are unclear about how they should be incorporated into class lessons and what approaches teachers might adopt when doing so. Three of the recommended tasks are "labelling," "matching" and "questions and answers". Further guidance is not provided. These activities could be approached from a constructivist perspective. For instance, for "questions and answers", students could be asked to work together in order to create questions about their Internet habits and develop different answers. In doing so, they would have to research or learn from each other, new vocabulary and ways of expressing themselves. They might then be evaluated through the teacher observing a simulation/improvisation of students interviewing each other.

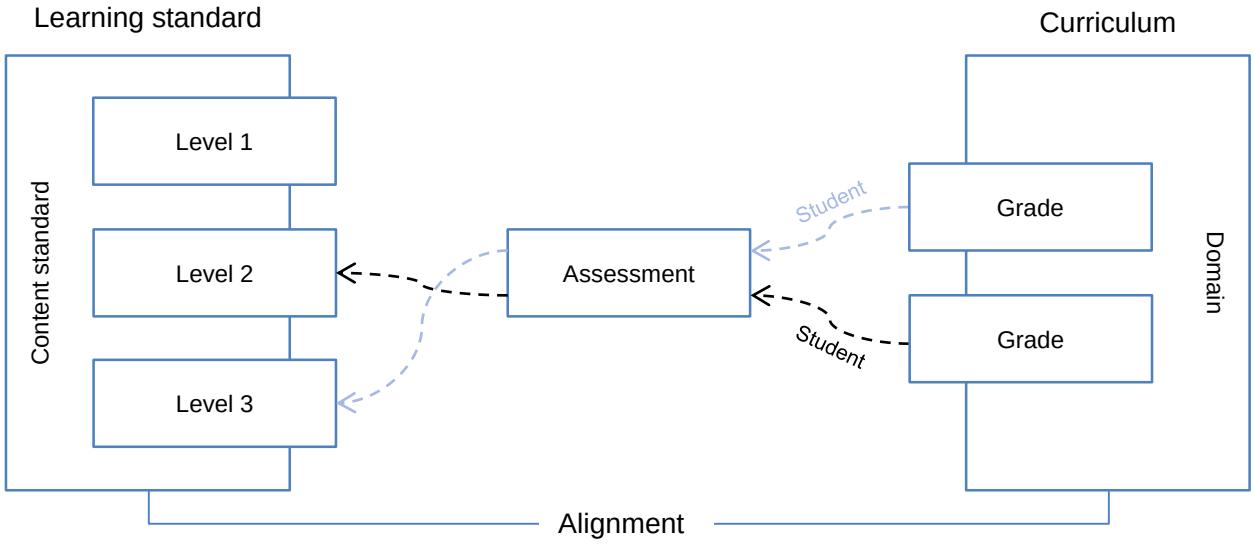
However, "questions and answers" could also be approached from a more traditional, behaviourist perspective. Teachers could create a list of Internet-related vocabulary that students are asked to memorise individually. Students might be assessed through a multiple-choice quiz, or through being asked specific questions to which they are expected to deliver pre-selected, correct responses.

Without explicit encouragement, teachers might interpret the tasks and activities in the curriculum in the manner illustrated by the second example simply because they are more familiar with that type of pedagogy. Future curriculum revisions, therefore, should be more specific, explicit and clear about what teachers are expected to do in their classrooms to engage students in active learning. Instead of tasks and activities that are expressed with two or three words, and are thus open to interpretation, detailed examples of proposed classroom activities that are aligned with constructivist approaches would be provided. Teachers would then not have to interpret an activity and try to make it constructivist, which they might not feel prepared to do, but would rely on using a collection of activities that are already constructivist in approach. In addition to examples appearing in the curricula themselves, separate materials could be given to teachers and schools that would provide further detailed guidance and examples of teaching from a constructivist approach (see Chapter 3).

Policy issue 2.2. Developing learning standards to help teachers understand what students are expected to know and be able to do

Learning standards illustrate what students are expected to be able to do. Clearly defined standards can inform the development of more effective and valid assessments, the results of which can then be used formatively by teachers to improve the learning of their students. Countries that have developed national learning standards include Australia, Austria, Belgium, Denmark, France, Luxembourg, Norway, the United Kingdom and the United States (OECD, 2013[31]). Learning standards are composed of a definition of achievement and different levels of aptitude (Kleinhenz and Ingvarson, 2007[39]). Figure 2.4 illustrates the relationship between complete learning standards, domain/grade level curricula and assessment.

Figure 2.4. Relationship between learning standards, curriculum and assessment



Source: CEPPE, Chile (2013[17]), "Learning Standards, Teaching Standards and Standards for School Principals: A Comparative Study", http://dx.doi.org/10.1787/5k3tsjqtp90v-en.

Recommendation 2.2.1. Develop learning standards

Turkey's curriculum features learning outcomes, but not necessarily learning standards (see Box 2.2). Without clear learning standards, Turkish educators will have difficulty understanding what exactly is to be assessed in their classrooms. They would not know how to categorise different levels of student proficiency and, therefore, would be less able to adapt their teaching to their students' individual abilities.

Establish standards with performance levels in core subjects

Learning standards first define what should be learned and what students should be capable of doing in a given subject by grade or level, particularly in core subjects. In the context of a competency-based curriculum such as Turkey's, standards are typically constructed to

depict what students should be capable of doing. They are also framed in a way that captures the integration of knowledge and skills (Box 2.6).

Box 2.6. Excerpts of standards from the United States Common Core

The United States organises its standards into domains and then grade levels. The OECD recommends that Turkey also organises its standards similarly as the country's curriculum is already configured in the same manner. Below are the Grade 5 standards for mathematics from the United States Common Core Standards.

Operations and Algebraic Thinking

- Write and interpret numerical expressions.
- Analyse patterns and relationships.

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths.

Number and Operations-Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Geometry

- Graph points on the co-ordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

Source: Common Core (2018[40]), *Common Core: State Standards Initiative. Preparing America's Students for College and Career*, http://www.corestandards.org/read-the-standards/ (accessed on 25 March 2018).

In developing its own learning standards for core subjects, it will be important that Turkey ensures that the standards are aligned with the overall educational goals expressed in the curriculum framework, though from the perspective of each domain. For instance, one overall goal is the development of 21st century competencies, such as creativity, which is identified in two documents from Table 2.3. As a transversal competency, it would be the responsibility of all domains to support this overall goal, and therefore the standards of each domain should reflect a focus on 21st century competencies.

The second step in developing learning standards is creating levels of performance, in which the competencies that are identified by the standards are also associated with different levels of aptitude (e.g. basic, proficient and advanced). The descriptions of these levels can then be used later to assess the amount of progress a student has made in a particular competency, and not just whether the student can or cannot perform the specified tasks. Box 2.7 shows an example of a learning standard that accommodates a range of student performance.

Box 2.7. "Working mathematically" learning standard from New South Wales, Australia

New South Wales, Australia divides its curriculum into different domain areas, which are further categorised into competencies. Each competency is associated with a content standard, which is disaggregated into three levels according to education stages, or levels of schooling. The following example comes from "working mathematically" competency of the mathematics domain.

Standard: Develop understanding and fluency in mathematics through inquiry, exploring and connecting mathematical concepts, choosing and applying problem-solving skills and mathematical techniques, communication and reasoning.

	Stage 1	Stage 2	Stage 3
Level 1	Describes mathematical situations using every day and some mathematical language, actions, materials, diagrams and symbols.	Uses appropriate terminology to describe and symbols to represent mathematical ideas.	Describes and represents mathematical situations in a variety of ways using mathematical terminology and some conventions.
Level 2	Uses objects, diagrams and technology to explore mathematical problems.	Selects and uses appropriate mental or written strategies, or technology, to solve problems.	Selects and applies appropriate problem-solving strategies, including in the use of digital technologies, in undertaking investigations.
Level 3	Supports conclusions by explaining or demonstrating how answers were obtained.	Checks the accuracy of a statement and explains the reasoning used.	Gives a valid reason for supporting one possible solution over another.

Source: New South Wales Education Standards Authority (2018[41]), *Mathematics K-10*, http://syllabus.nesa.nsw.edu.au/mathematics/mathematics-k10/outcomes/.

Creating performance levels would benefit student learning in Turkey by helping teachers adapt their instruction and assessment to students' different current levels of competency. For example, if asked to solve a problem, a student might be able to solve some of the problem but not all of it or demonstrate a correct approach to solving the problem but ultimately arrive at an incorrect answer. Assessments need to be able to determine and report these types of nuances in student performance, and teachers need to be able to adapt their instruction to accommodate these identified differences. Research shows that successfully differentiating students' education in this manner can lead to improved student outcomes (Dumont et al., 2010[42]).

Furthermore, establishing learning standards would help modernise and synchronise Turkey's central and classroom assessment procedures (see Chapter 3). Examinations developers would be encouraged to design assessments that are aligned with learning standards that are competency-based. The developers, therefore, would be encouraged to expand the repertoire of test items to incorporate more suitable formats, such as short-answer and open-ended items, rather than relying on simple multiple-choice items. At the classroom level, teachers' assessment methodology would become more consistent as they, too, would change their activities to be more aligned with the learning standards.

Develop learning standards around grade levels

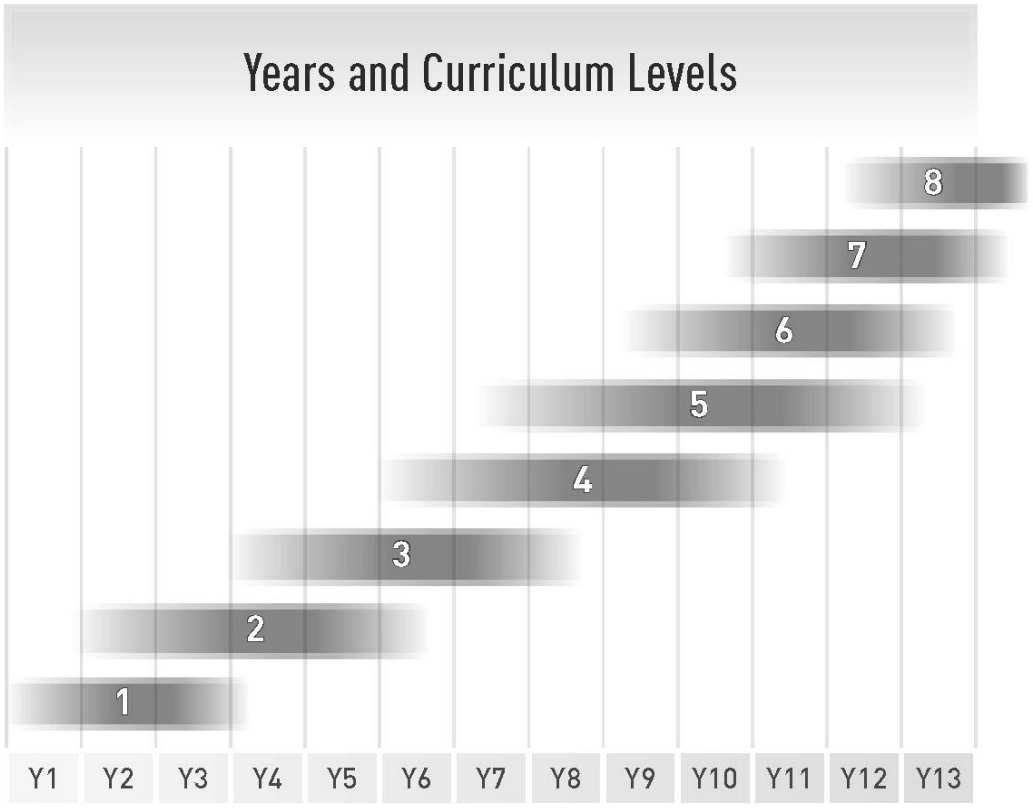
As Turkey's curricula are currently organised into grade-level units, it would be advisable to also develop learning standards for each grade. Each unit would retain its outcomes, but these outcomes would support the standards affiliated with their respective domain and grade. Through this approach, the individual units that comprise a grade's curriculum would be consistently aligned with each other and the learning standard of the grade.

It is important to note that levels of performance are determined independently of a student's grade (though advancement through grades should be associated with achieving minimum standards). A student can be in Grade 8 but demonstrate a lower level of performance in a particular competency than a student in Grade 6. This arrangement is more constructive because it allows teachers to properly identify a student's current level of competency, particularly if a student is struggling, and adapt instruction for that student.

To better understand the relationship between performance levels and grades, it is helpful to think of levels of performance as being able to span multiple grades, as illustrated in Figure 2.5. New Zealand's standards are provided as an example because it is a country that also organises students by grades and standards by different levels.

Turkey's performance levels would be conceptualised similarly. By classifying students according to performance level and grade, teachers can better adapt their instruction according to their students' needs. This is particularly important in Turkey, as grade repetition is very rare until Grade 8 and students move through three types of schools (see Chapter 3). A teacher who receives a new student, for example, would be able to tailor his/her teaching to that student's performance level, ensuring the continuity of that student's education and maximising his/her time spent in school.

Figure 2.5. Years (grades) and curriculum (performance) levels from the New Zealand curriculum



Source: New Zealand Ministry of Education (2007[27]), *The New Zealand Curriculum*, http://nzcurriculum.tki.org.nz/content/download/1108/11989/file/The-New-Zealand-Curriculum.pdf.

Support the use of standards

The key role of learning standards is to act as a consistent point of reference such that illustrate what exactly should be assessed. Educators will require support as they begin to use newly created standards in their schools and classrooms. The amount of resources that would be needed would be substantial as using standards in lesson planning and assessment represents a significant change. Chapter 3 reviews how Turkey can align learning standards and classroom practices while Policy issue 2.3 explores how to gain support for reforms.

Another method of encouraging the use of standards would be to ensure that they guide the development and reporting of national assessments. In particular, performing analysis on individual items that are based on the standards would act as an example to teachers of how standards can be used in assessment (see Chapter 4). The standards should also be used to guide the wider evaluation system – teacher appraisal and school evaluation – so that teachers and schools are expected and supported to embed the learning standards in classroom instruction (see Chapter 5).

Policy issue 2.3. Communicating national learning goals to society to build trust and support for change

The change in teaching and learning that is envisaged by Turkey's learning goals is profound. Creating a curriculum framework and learning standards are effective methods of articulating and clarifying the intended changes, but those changes still need to be effected and sustained in Turkish schools.

Research shows that education and curriculum reforms can fail to succeed because government goals are ambitiously conceptualised but are not always accompanied by strong communication and implementation plans (Havelock and Huberman, 1977[43]; Fullan, 1992[33]). Changing something as integral as teaching and learning, for example, tends to encounter significant system inertia as individuals who are affected might be unclear about why they should change their developed behaviour (Burns and Köster, 2016[44]). In cases such as these, defining the desired change is not enough; it is also necessary to plan and invest in how to realise the changes that are desired (Levin, 2010[45]).

In the Turkish context, considering the implementation of reforms is particularly important. The progressive, learner-centred approach that the government aims to achieve is not reflected in all the country's classrooms. Recurrent curriculum reforms have also created some "change fatigue" among Turkish educators, making it even harder for them to commit to the latest iteration (Bernerth, Walker and Harris, 2011[46]; Dilkes et al., 2014[47]). Finally, Turkey's societal focus on examinations, which carry high stakes with respect to future opportunities, is very strong. The OECD review team was told by teachers and school leaders that they feel pressure from parents to prepare students for examinations at the expense of following the curriculum. Even in primary school, teachers said that they felt pressured to train students in multiple-choice tests and provide parents with summative evaluations of their students' performance in these, rather than against the full breadth of the curriculum.

Recent changes to the high school placement system – ending the compulsory examination and making student placement for most students based on geographic area – aim to reduce the national focus and pressure on examinations (see Chapter 4). However, in order to achieve the desired transformation in teaching and learning, Turkey will also need to take direct action in order to overcome system inertia and change fatigue. This would entail making the case for change and making more visible and accessible, the goals that Turkey is working towards. Furthermore, it will be necessary to create mechanisms to support schools as they implement the curriculum and confront societal pressure to focus more on examinations.

Recommendation 2.3.1. Make national learning goals more visible

Analyses of the landmark 2006 curriculum reform suggest that while the direction of the change was positive and aligned with international trends (OECD, 2007[48]), it was also executed quickly without sufficient consultation and piloting before its release (Aksit, 2007[49]) or communication and promotion afterwards (Demirtas and Erdem, 2015[50]). In contrast, the 2017 curriculum reform has focused heavily on receiving consultations during its development and communications after its release. For example, the OECD review team was told that piloting of the new curriculum was widespread and that teachers from the pilot schools were invited to workshops to provide their feedback. Furthermore, the curriculum was also released online for public consultation before the final version was published.

Despite these positive developments in consultation and outreach, Turkey's national learning goals, based on competency-based learning and constructivist pedagogy, are still not widely understood. From teachers, schools and policymakers, the OECD review team heard very different interpretations of the current direction of curriculum reform and widespread inconsistency in what is meant by key principles, such as competencies and constructivism. Recent research confirms this, revealing limited understanding on the part of teachers of core pedagogical techniques emphasised in the curriculum, such as formative assessment (Kan, 2017[2]). There has been little research on parental and broader societal responses to curriculum reform in Turkey, though it might be inferred that if teachers and schools do not understand the intended changes then public comprehension would be lower still. None of the parents interviewed by the review team, for instance, seemed aware of the recent 2017 reforms.

To realise Turkey's vision of learning, therefore, it is necessary for the government to communicate to stakeholders what the vision entails and why it is important (Fullan, 2006[51]). This requires more technical guidance to teachers and schools on how to introduce and assess the curriculum, as well as changing the standards used to define and evaluate the quality of teaching and schooling. Chapters 3 and 5 of this report provide recommendations of how this might be done.

It is also important to proactively build momentum and capacity for reform, not only to address system inertia but also to mitigate the risk of fatigue and frustration after over a decade of curriculum change (Fullan, 1992[33]). Turkish society needs to better understand Turkey's learning goals so schools and teachers feel supported and trusted by their communities when they introduce changes. Creating a national communications campaign around Turkey's learning goals and making visible successful examples of change could help build this understanding.

Build a national communications campaign

A critical element of building understanding and support around educational reform is explaining the rationale for the change. Experts have noted that reforms, such as curriculum revision, are frequently met with scepticism by individuals whose roles are affected by the desired change (Burgess, Robertson and Patterson, 2010[52]). Thus, the justification for change needs to be carefully considered and effectively communicated in addition to the content of the change (Njeng'ere Kabita and Ji, 2017[53]).

To strengthen communications around curriculum reform, countries and economies invest significant resources in preparing the public for the change (OECD, 2011[54]). For example, education officials in Hong Kong (China) formed a close relationship with their local media representatives. In the early stages of designing the new curriculum, Hong Kong (China) education leaders held seminars for reporters to clarify why the reform was occurring. Chief editors of major media outlets were also enlisted and asked to help engage the public by transmitting messages about the intended changes to the curriculum (OECD, 2011[54]). Mexico is currently unveiling its new curriculum as part its *Nuevo Modelo Educativo* movement. To communicate the reforms, the Mexican government has created a comprehensive website with a wide collection of informative videos that help explain the changes (https://www.gob.mx/nuevomodeloeducativo). These international examples illustrate how government communications can be leveraged to engage the public and build understanding around curriculum reforms.

Turkey is experienced with successfully using education media campaigns and can utilise best practices from those cases to communicate the country's learning goals, as already

begun under 2023 Vision. For example, the "Father, Send Me to School" campaign positively influenced the general opinion about girls' education. The campaign produced several advertisements that explained the importance of girls' education from the perspective of responsible citizenship and economic interests. Many of these are now available on websites such as YouTube and have received hundreds of thousands of views (Dogan Group, n.d.[55]). Similar techniques can be employed to promote Turkey's approach to teaching and learning to educators and community members.

Showcase examples of successful changes

While top-down approaches can be effective in building understanding, research has shown that equally if not more important is horizontal interaction in which schools act as models for each other (Greany, 2017[56]). Seeing how reform is implemented successfully in an institutional context can help the public better visualise and understand the reform, and help educators implement the same policy in their own schools (Fullan, 2006[51]; Fullan, 2004[57]). In Turkey, seeing successful examples of change would also help build confidence among teachers and school leaders that they can realise the exemplified change and help them avoid change fatigue.

From an international perspective, to help illustrate student-centred learning in classrooms, Shanghai (China) education leaders produced videos of what is considered model teaching with one camera focused on the teacher and another on students. The videos were then disseminated to other teachers around the city (OECD, 2011[54]). To showcase school-level success, Colombia has created a Day of Educational Excellence (now called "E Day") to celebrate schools that demonstrate outstanding practices and performance (Colombian Ministry of Education, 2010[58]).

In Turkey, the OECD review team visited several schools that had successfully embraced and implemented the curriculum. It would be helpful for these schools to be publicised as representatives of Turkey's learning goals so community members can visualise and better understand what is expected, leading to greater support of those expectations. Such promotion can be done nationally, but also provincially, in order to illustrate that Turkey's vision can be realised not only in a small number of well-resourced schools but also in more rural and isolated areas of the country.

Recommendation 2.3.2. Expand local support for schools

While the Turkish curriculum affords some flexibility to schools to create their own classroom activities, technical support for teaching, learning and assessment is provided primarily by the ministry. Given the size of Turkey's education system, this responsibility can be overwhelming for a single organisation and limit the support that is provided (Gershberg, 2005[59]). In recent year, several efforts, some with the support of international organisations, have been undertaken to try to provide more technical support at the school level (Şen and Bandyopadhyay, 2010[60]; Çınkır, 2010[61]). But these have largely focused on decision-making and administrative tasks rather than on the kinds of instructional support that can be provided closer to schools (Balkar and Kasurka, 2015[62]; Çınkır, 2010[61]).

Bring centres of support closer to schools

Identifying local centres of support could improve the responsiveness of assistance to schools as they implement curriculum reform (Schleicher, 2015[32]; World Bank, 2014[63]). Moreover, local sources of support can be better placed to understand the context of schools

and provide more tailored guidance compared to a central location, which is naturally further from the daily reality faced by school-level actors (Higham, Hopkins and Matthews, 2009[64]).

Several countries and economies have devolved their support systems following curriculum reform. In 2017, Austria embarked on a comprehensive education reform that included restructuring school time and creating school learning groups. As part of the reform package, new education directorates were established in each province and were given responsibility for testing and implementing new pedagogical approaches in schools from their jurisdictions (OECD, 2017[65]). Slovenia changed the curriculum and structure of its general upper secondary schools in 2009 (OECD, 2016[66]). To help implement the reform, the country also created school development teams that operate at municipal- and school-levels. The teams are composed of principals and high-quality teachers (school champions) who help embed national changes into school practices (Sentočnik, 2014[67]). While these countries are much smaller than Turkey, their approaches to providing support directly to schools provide examples to draw on.

In Turkey, evaluation and assessment centres have been created to decentralise how schools are supported in their assessment activities. This practice can be extended to localising the support that schools receive with respect to implementing the curriculum. For instance, provincial education directorates, and in some district centres, could play a larger role in providing support services to schools, effectively acting as a middle layer of resources between the national government and schools themselves. They would be responsible for bringing together technical capacity and delivering co-ordinated support that is contextualised to the schools' environments.

Promote peer-learning and networking

Research into education change has noted that some of the most effective catalysts for implementing reforms can be peer-to-peer relationships between schools (Higham, Hopkins and Matthews, 2009[64]; Fullan, 2004[57]). Importantly, school networking is not just about identifying and learning from "single, heroic individuals" but about teams working together across leadership hierarchies to provide immediate support. The role of the school system is to create an environment in which this type of collaboration is encouraged and facilitated (Greany, 2017[56]).

Other countries and economies have adopted similar approaches. For example, in 2015 Mexico divided the country into five different education regions. Each regional administration was given the responsibility to support each other and engage in state-state co-ordination to foster regional decision making (OECD, 2018[68]). Peer-learning has also been facilitated between individual schools. Box 2.8 provides information about how Finland encourages networking between schools to support them through periods of curriculum reform. While the Finnish context is very different from that of Turkey, the country's structured approach to curricula reform and use of technology are informative, especially as Turkey has already made a significant investment in the latter.

Box 2.8. Curriculum reform and implementation in Finland

Finland undertakes a comprehensive reform of its curriculum every ten years, with each cycle of reform occurring over roughly a four-year period. The most recent reform began in January 2012 with a meeting of the Finnish Board of Education (FBE) and concluded in August 2016, when the curriculum was officially implemented in Finnish classrooms.

Finnish curriculum reform is collaborative and interactive in nature. Several working groups of over 300 experts and stakeholders are convened to work with the FBE in writing the new curriculum. During the process, three drafts of the curriculum are published to the public and the Finnish government requests feedback after the release of each draft. The final curriculum is available on line and is accompanied by a video from the Minister of Education in which the objectives and content of the newest curriculum reform are explained.

Similar to Turkey, schools in Finland are expected to adapt the curriculum to their own environments (see Chapter 3). Therefore, the curriculum represents what Finland calls "the starting point of a cascade" and is designed around several "wedges," which act to open up opportunities for schools to further pursue the desired directions. Wedges that were identified in the development of the most recent curriculum include integrative [transversal] studies, school environments and promoting school networking.

Once schools begin adapting the national curriculum for their own use, they are supported extensively by the national government and each other. The FBE has even created a fund to support 180 schools from 38 municipalities who wish to learn from each other. Furthermore, all school-level curricula are submitted to and housed by an online repository such that the curricula can be reviewed for alignment with the national curriculum. Finally, the FBE commissions institutes of tertiary education to develop professional development programmes aligned with the curriculum for teachers. These programmes are particularly helpful in aiding rural municipalities that have fewer resources and less capacity.

Sources: Government of Finland (2015[69]), Finland, a Land of Solutions, http://valtioneuvosto.fi/documents/10184/1427398/Hallitusohjelma_27052015_final_EN.pdf/f1071fae__a9334871 bb38 97bdfd324ee6 ; Finnish National Board of Education (2015[70]), "New Learning Environments in Finland: The Finnish National Board of Education and the 2015/16 Core Curriculum Reforms", http://edredesign.org/sites/default/files/Case%203%20__%20Finland.pdf ; Finnish National Agency for Education (2014[71]), Finnish National Agency for Education Curriculum Reform 2016, http://www.oph.fi/english/education_development/current_reforms/curriculum_reform_2016.

Conclusion

Turkey's curriculum provides the foundation for a profound transformation of teaching, learning and assessment in the country. Ensuring that teachers, schools and society share a clear understanding of the curriculum's aspirations and feel supported in following the curriculum are important steps towards effective implementation. The remaining chapters in this review set out what changes can be made to the assessment system – in terms of how teachers use assessment and the role of national examinations and assessment – so that the changes to teaching, learning and assessment envisaged by the curriculum are integrated into the classroom.

Table 2.4. Policy recommendations

Policy issues	Recommendations	Actions
2.1. Developing a curriculum framework to give greater coherence and clarity to national learning goals	2.1.1. Develop a unifying national curriculum framework	● Articulate the overall learning goals in a vision statement ● Describe the differences between competency-based and knowledge-based teaching and learning ● Define and promote transversal, 21st century competencies ● Explain constructivist pedagogy and provide examples of its usage
	2.1.2. Use the curriculum framework to guide future revisions of individual domain curricula	● Ensure that overall goals are well represented in future domain-level curricula objectives ● Give stronger emphasis to competency-based learning in future domain-level curricula ● Align future domain-level curricula with constructivist approaches
2.2. Developing learning standards to help teachers understand what students are expected to know and be able to do	2.2.1 Develop learning standards	● Establish standards with performance levels in core subjects ● Develop learning standards around grade levels ● Make standards a reference point for other reforms ● Support the use of standards
2.3. Communicating national learning goals to society to build trust and support for change	2.3.1. Make national learning goals more visible	● Build a national communications campaign ● Showcase examples of successful changes
	2.3.2. Expand local support for schools	● Bring centres of support closer to schools ● Promote peer-learning and networking

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Chapter 3. Improving teachers' classroom assessment practices

This chapter provides recommendations for improving the use of classroom assessment in Turkey so that it contributes more effectively to supporting student learning. At present, while teachers in Turkey regularly undertake assessments in the classroom, these tend to be dominated by short-answer, closed-question formats, like multiple-choice questions. This limits the range of students' knowledge and skills that teachers can assess. The focus on summative assessments that result in a numeric mark also limits space for formative assessment, one of the most important types of assessment for learning. This chapter provides suggestions on how teachers can be encouraged to use a broader range of assessment formats and integrate more formative assessment practices into their regular classroom teaching.

Introduction

Teachers' regular classroom assessments have a greater impact on student learning than any type of assessment conducted outside the classroom (Absolum et al., 2009[1]). Classroom assessments are particularly important to improve student learning, especially when they comprise formative feedback and help students to understand their own learning strategies. Classroom assessments also allow for the evaluation of competencies that cannot be easily measured using external, standardised assessments. When they are conducted on an ongoing basis, they provide a range of evidence which teachers can use to monitor student progress and to adjust teaching in response to students' learning needs. This means that in countries with effective student assessment systems, greater emphasis is placed on what happens in the classroom and the role of the teacher (Clarke, 2012[2]).

Over the past decade, Turkey has taken positive steps towards improving the learning value of assessment. These include encouraging teachers to conduct formative and performance-based assessments to support a competency-based approach to teaching and learning. This chapter provides recommendations on how the use of assessment could be further strengthened to ensure that all students acquire essential competencies and provides students with the opportunities to develop and demonstrate achievement across the breadth of the country's curriculum. This chapter suggests practical tools for feedback and assessment that Turkey can develop immediately to provide teachers with resources for effective assessment. These tools will need to be complemented by critical but longer-term measures, so that teachers have learning opportunities at the beginning and throughout their careers to develop a sound understanding of assessment and its practical application.

Context and main features of classroom assessment

Policy framework

The curriculum encourages teachers to use a broad range of assessments to support competency development

In 2005, Turkey introduced a new competency-based curriculum that emphasised a student-centred, constructivist approach to teaching and learning. This was a major shift from the previous curriculum that was much more prescriptive, content-heavy and structured around teachers' transmission of knowledge within discrete domains (OECD, 2007[3]). Over the past decade, successive curriculum changes have further supported this transformation, with the most recent revisions in 2017 aiming to further lighten the content load and elevate the importance of transversal competencies like critical thinking and problem solving.

The 2005 curriculum reform and subsequent revisions have implied a major change in what students learn and how they learn, and with this of how teachers use assessment to support and measure their learning progress. In particular, the curriculum places a much stronger emphasis on teachers' use of formative assessment practices, including student self-assessment, as central to a constructivist approach to learning. It also calls for teachers to use a wider range of assessments, such as projects, portfolios, role plays, quizzes and pen and paper written tests, as a means to engage students and evaluate a broader range of outcomes beyond knowledge recall (MoNE, 2013[4]). These changes in expectations of assessment practice have been reinforced by the decision to end the reliance on summative assessments and numerical marking in Grades 1 to 3, instead of requiring teachers to use

qualitative descriptors for students' performance in line with similar reforms in many other OECD countries.

A series of reforms in 2017 aims to support more effective classroom assessment practice

While curriculum reforms have been accompanied by some training and resources to help teachers adopt new assessment methods, there is growing recognition within the Ministry of National Education (MoNE) that more needs to be done to support Turkish teachers in using a broad range of assessments to enable and monitor competency development. As of 2017, a number of important initiatives have been introduced in this area. The Ministry's General Directorate of Measurement, Evaluation and Examination Services is undertaking a project to strengthen teachers' classroom assessment capacity and has established provincial monitoring and evaluation centres to provide assessment guidance to schools and professional development to teachers. Planned changes to initial teacher preparation and continuous professional learning as part of the Teacher Strategy 2017-23 are also intended to improve teachers' assessment skills, alongside other key teaching competencies (see Box 3.1). Finally, the decision to end the compulsory, high-stake Grade 8 examination is expected to create more space for teachers and students to use a wider range of assessments in lower secondary and, with this, focus on the breadth of intended curriculum outcomes.

Box 3.1. Turkey's Teacher Strategy, 2017-23

Turkey's Teacher Strategy provides a roadmap for teacher training and development based on three main objectives:

1. Ensuring a high-quality, well-trained and professional teaching profession: by improving initial teacher education and ensuring that only the most suitable candidates for teaching are selected from university graduates.
2. Ensuring teachers' continuous professional and personal development: by regularly undertaking performance evaluation of teachers and improving the quality of teachers' professional development activities.

   This will also include the introduction of a new School-Based Professional Development Model, where teachers will undertake a self-assessment of their learning and development needs, based on the teacher competencies, and complete an individual professional development plan. The Ministry of National Education will use this to help plan professional development opportunities, in response to teachers' needs.
3. Improving the perception and status of the teaching profession: by improving the status of the teaching profession, improving teachers' working conditions; reducing regional differences in teaching conditions; and improving the career and remuneration system.

The objective is to develop a system where teachers are promoted to different steps in a career path, linked to increasing qualifications, status and completion of professional development. This will restructure the existing teacher career path based on teachers' performance evaluation results, examinations taken, student achievements and other

criteria related to teacher competencies, teachers' voluntary activities related to their field and profession, and completion of training in the newly developed Teacher Academies.

Actions and Timeline in Turkey's Teacher Strategy

Action	Timeline
Updating teacher competencies	By the end of 2017
Developing a mandatory performance evaluation system for all teachers	By the end of 2018
All teachers take a test according to the new competencies every four years	By the end of 2018
Providing all necessary training to evaluators for determining teachers' development needs and supporting their professional development	By the end of 2018

Source: MoNE (2017[5]), *Ögretment Strateji Belgesi 2017-2023 [Draft Teacher Strategy 2017-2023]*, Ministry of National Education, Ankara.

Classroom assessment regulations and resources

Central regulations reaffirm the importance of using varied assessment types

In common with the majority of OECD countries, classroom assessment in Turkey is governed by central regulations (OECD, 2013[6]). The regulations provide a broad framework setting out the types and maximum and minimum numbers of assessments that teachers should undertake (see Table 3.1). The regulations also set out some principles for assessment such as ensuring that it reflects the curriculum's principles for learning, is used to constantly monitor student learning, considers the development of broad learning goals like critical thinking and creativity and reasoning skills, and is valid and reliable with appropriate rubrics or scoring keys developed.

While central regulations reflect the curriculum's expectation that teachers use a range of different assessments, in practice teachers still rely heavily on multiple-choice tasks that are easy to develop and mark. This is confirmed both by recent research (Kan, 2017[7]) and by interviews conducted with teachers, students, principals and policymakers as part of this review. The OECD review team's discussions indicated that multiple-choice tests are conducted especially in the period leading up to the Grade 8 and 12 examinations to help prepare students. These tests focus narrowly on the subjects and knowledge that are covered in the central exams, while other non-examined subjects are given less attention. In 2016, the ministry introduced a clause in national regulations stating that teachers can only conduct one multiple-choice test per course per semester in upper secondary education. However, as long as high stakes examinations still rely on multiple-choice items the classroom focus on this format will be difficult to change.

Table 3.1. Central regulations for classroom assessment

	Assessment type	Contents	Other factors evaluated	Reporting student achievement
Pre-school and primary education school regulation				
Grades 1-3	● No summative classroom examinations ● Evaluations based on in-class performance and teachers' observations		● Attendance ● Behaviour	Descriptive scale: "very good", "good", "should be improved"
Grades 4-8	Exams	● Two per course per semester ● Teachers prepare different types of exam questions ● Exams cover topics from the beginning of the semester, with priority to topics most recently covered ● Exam duration is 40 minutes	● Completion of course activities e.g. homework ● Attendance	● Mark out of 100 for each course, based on average assessment results (i.e. exams and projects) plus points for participation in course activities ● Students also receive a mark for their behaviour based on descriptive scale (very good", "good", "should be improved")
Grade 5 onwards	Projects	● At least one project on one or multiple courses based on student preferences per school year ● Based on individual or group work		
Secondary school institutions regulation				
General and vocational	Written and applied exams	● Two or more per course per semester. Written exams should consist of open-ended items, essays, etc. One exam per class can be based on short answer, paired questions or multiple-choice ● For foreign language courses, the exams test students' speaking, writing and listening skills ● Priority is given to the most recent topics covered in the course	● Attendance, preparation and behaviour ● Community service activities ● National and international competition results	● Mark out of 100 for each course based on average marks across assessments ● Five-point grading scale: "very good" (85 to 100 points); "good" (70 to 84.99 points); "average" (60 to 69.99 points); "passed" (50 to 59.99 points); and "failed" (0 to 49.99 points)
	Performance studies	● At least one performance study in all courses per semester		
	Projects	● At least one project in at least one course per school year		
Vocational	Skills exam (applied or written)	● One per course(s) per year ● Evaluates skills training ● Carried out by a commission representing the profession	● Internship file (20% of exam score)	

Sources: MoNE (2017[8]), *Country Background Report*, Ministry of National Education, Ankara; MoNE (2016[9]), *Millî eğitim bakanliği okul öncesi eğitim ve ilköğretim kurumlari yönetmeliği [Pre-school and Primary Education Schools Regulation]*, Ministry of National Education, Ankara; MoNE (2016[10]), *Secondary School Institution Regulation*, Ministry of National Education, Ankara.

More central resources to help teachers create and use complex assessments are being developed. At present, some teachers rely on assessments in textbooks and that they find themselves on the Internet (Kan, 2017[7]). However, the ministry is progressively developing more resources to help teachers create and use more complex assessments. In particular, a new online portal to help teachers share teaching materials – *EBA* – allows teachers to share assessment resources with each other. The portal is intended to encourage

teachers to take more of a leading role in designing their own assessments on the basis of models that others have found effective. Another important pilot initiative is the school portfolio. The e-portfolio was still under development at the time of the OECD review but it aims to help teachers document not just students' academic achievement but also participation in extra-curricular activities, with the possibility of taking this kind of information into account for assessment and high school and university placement decisions. A project is also underway, led by the General Directorate of Measurement, Evaluation and Examination Services in the ministry, to develop guidelines and grading rubrics for teachers to assess students' writing skills, with the aim of building confidence and capacity among teachers to use open-ended assessment formats. While these are promising projects, at the time of the drafting of this review, the range of available assessment resources was limited, few curriculum subjects were covered and there was a lack of tools offering guidance to teachers on how to develop and conduct high-quality assessments.

Responsibilities for classroom assessment

The ministry determines all policies and regulations relating to classroom assessment. While the ministry overall is responsible for policies related to classroom assessment, within the ministry, responsibility for assessment policy is shared by many bodies. Different directorates set the requirements for classroom assessments depending on the level and type of education including the General Directorates of Basic Education, Secondary Education, Vocational and Technical Education and Religious Instruction. Assessment expertise is also located outside each of these directorates, in the Directorate of Measurement, Evaluation and Examinations (see Figure 1.1, Chapter 1). The latter has some responsibility for developing teachers' assessment capacity, alongside the Directorate of Teacher Training and Development and the Council of Higher Education (with respect to initial teacher education). Finally, policy on diagnostic assessment – to identify students in need of additional teaching and learning support – is developed separately by the Directorate of Special Education and Counselling Services.

Principals and teachers report developing and using their own assessments less than in other OECD countries

Teachers in Turkey come together in grade- and subject-based groups to discuss how classroom assessments will be used in the school. However, while national regulations on assessments give teachers some autonomy to develop and use their own assessments, teachers in Turkey report exercising this autonomy less than teachers in other OECD countries. According to data from the OECD Programme for International Student Assessment (PISA), just one in ten students attend a school where Turkish teachers use assessments that they have developed themselves more than once a month, compared to almost four in ten students on average across OECD countries (OECD, 2016[11]). Principals in Turkey also exercise little pedagogical leadership of assessment. In 2015, principals in Turkey surveyed by PISA reported that 92% of students attend schools where national education authorities, rather than principals or teachers, establish student assessment policies. This is the highest among all countries that participate in PISA and significantly higher than the average among OECD countries (25%) (OECD, 2016[11]).

Use of classroom assessment results

Assessments carry stakes for selection to the next level of education

The average of a student's classroom assessment marks from Grades 9 to 12 is added to their marks in the examinations for university placement in Grade 12 to calculate a score to place students in tertiary education institutions and programmes. The marks from classroom assessments contribute a minimum of 30 and maximum of 60 points overall, meaning that individual marks can make a difference between a student gaining a place on their desired programme or not.

Under the previous TEOG (*Temel Öğretimden Ortaöğretime Geçiş Sistemi* – Transition from Elementary Schools to Secondary Schools Exam), classroom assessment results from Grades 6 to 8 contributed 30% to a student's scores for high school placement, with the remaining marks based on results from a central examination. Under the new system for high school placement in 2018, classroom assessments will no longer carry stakes for those students who are placed in one of their preferred local high schools. However, the criteria to determine places in oversubscribed high schools will take into account student's average grades from classroom assessments, among others.

Assessments have an important role for progression in upper secondary

Regulations restrict the conditions in which repetition can occur up to Grade 8, resulting in little repetition in primary and lower secondary, with rates significantly below the OECD average (OECD, 2016[11]). However, from Grade 9 onwards, students can be required to repeat a grade if their classroom assessment marks are not satisfactory and many students are required to repeat. The share of students who repeat in upper secondary school (7.7%) is much higher than the OECD average (1.9%) (OECD, 2016[11]). The high rates of repetition in upper secondary might be related to a number of assessment-related factors including students not being placed in a high school programme that reflects their strengths and interests, a lack of consistency between the expectations of teachers in lower and upper secondary schools, and classroom assessment not being used effectively in the preceding grades to ensure that all students progress in line with national standards, with appropriate support provided to students to ensure that they do not fall behind.

Students' results are reported regularly. Teachers in Turkey report student performance to students and their parents twice a year (once per semester) in report cards, in addition to regular parent-teacher meetings. The report cards include student marks from classroom assessments and a comment box in which teachers are expected to provide their opinion of the student. Schools also record students' results from classroom assessments and centralised exams and other information about students (e.g. attendance) into the e-school system which is accessible to teachers, principals and relevant ministry staff. There is also an electronic Parent Information System which parents can use to monitor student absenteeism, school or teacher announcements, and the grades awarded to students for their behaviour. However, neither the report cards nor the electronic reporting systems allow for the inclusion of qualitative feedback on student performance like descriptions of students' strengths and areas for improvement, and learning strategies to help them improve.

Teachers' assessment capacity

Over a decade after the new curriculum was introduced, teachers in Turkey need to be supported to develop a better understanding of assessment terminology and the purposes of different assessment methods. At present, many teachers prefer to use "short, easy and

practical" assessment methods and are not fully aware of the breadth of methods at their disposal (Kan, 2017[7]). Teachers also do not show a consistent understanding of what formative assessment is, how it should be embedded within teaching practice and how results should inform the teaching-learning process, including adjustments to teaching. Some teachers with whom the OECD review team spoke described continuous summative assessment practices when they were asked to explain how they conduct formative assessment. In order to conduct classroom assessments effectively, teachers should understand the different purposes of assessment, be able to employ a wide range of assessment types and judge which type of assessment is most relevant for different steps in learning and evaluating different learning outcomes (see Box 3.2).

Box 3.2. Effective classroom assessment practices

The following effective classroom assessment practices are derived primarily from the American Federation of Teachers' Standards for teacher competency in educational assessment of students (American Federation of Teachers, 1990[12]) and the Australian Institute for Teaching and School Leadership's Australian Professional Standards for Teachers (AITSL, 2011[13]).

- **Planning, selecting and designing assessments that are appropriate and of high quality.** This requires knowledge of a broad range of assessment methods in order to select assessments (e.g. from an assessment bank) or design assessments that are most appropriate to the school curriculum and for their intended purpose. For example, teachers need to know which methods are most appropriate for diagnosing students' learning needs or for measuring students' acquisition of specific competencies set out in learning standards or outcomes in the school curriculum. Being able to design assessments of high-quality means knowing what makes an assessment technically viable (e.g. valid, reliable), and having the capacity to design assessments that meet those requirements. It also means being able to incorporate formative assessment into regular, everyday teaching practice.
- **Conducting a range of assessments to gather multiple sources of evidence of student learning.** This means giving students opportunities to demonstrate what they have learned in a multitude of different ways, including through teacher observations, conversations and student products relating to traditional assessment methods (e.g. tests) and "alternative" assessment methods (e.g. portfolios). This enhances the reliability, validity and equity of assessments by increasing the likelihood that they will dependably reflect different students' progress over time.
- **Making consistent professional judgements about students' levels of performance.** Teachers who are effective at making judgements about student learning are able to use scoring rubrics, as well as develop their own assessment criteria, to accurately interpret the results of assessments in order to determine students' performance levels, strengths and areas for improvement. They grade students fairly and are aware of external factors that can affect student results, as well as their own biases. They participate in moderation activities with other teachers (e.g. marking or reviewing each other's students' work) to improve the reliability of their judgements.

- **Using assessment results for formative and summative purposes.** Teachers who are skilled at using assessment results for formative purposes are able to provide helpful feedback to students on their learning and adjust their teaching to address students' needs. They are also able to use summative assessments, like national assessments or exams, as well as their regular, everyday monitoring of student learning, for formative purposes. They can communicate students' summative and formative assessment results to different audiences (e.g. students, parents, other teachers) in ways that are clear and accurate and connected to the curriculum.

Sources: American Federation of Teachers (1990[12]), *Standards for Teacher Competence in Educational Assessment of Students*, http://buros.org/standards-teacher-competence-educational-assessment-students; AITSL (2011[13]), *Australian Professional Standards for Teachers*, https://www.aitsl.edu.au/docs/default-source/apst-resources/australian_professional_standard_for_teachers_final.pdf.

Initial teacher education covers classroom assessment but is more theoretical than practical

Turkey has both concurrent and consecutive initial teacher education programmes, which are offered by university faculties of education. Concurrent programmes last for four years and lead to a bachelor's degree. Completion of a bachelor's programme is a prerequisite for entry to the consecutive programme, which lasts one year and leads to a graduate degree.

The Council of Higher Education (YÖK) that is separate and independent from the ministry, governs the tertiary sector and establishes the core curriculum of initial teacher education programmes. These include a "Measurement and Evaluation" course that covers topics like basic concepts in assessment, assessment tools, "alternative" assessment methods relevant to the school curriculum, test development, the assessment of learning outcomes, and grading (Birgin and Catlioglu, 2009[14]). The course was being revised at the time of the OECD review.

Outside YÖK, the Evaluation and Accreditation Association of Educational Faculty Programs (EPDAD), which is the external accrediting body for initial teacher education, sets the accreditation requirements for initial teacher education. Turkey's current accreditation requirements for initial teacher education programmes reference preparation in classroom assessment, but only at a high level. They state that, at the end of the programme, teacher candidates must be proficient in monitoring and evaluation (EPDAD, 2016[15]). However, the accreditation of initial teacher education programmes is not operational (Kamal, 2017[16]).

Research in Turkey and the OECD review team's interviews have highlighted that initial teacher education programmes lack content on the practical application of assessment methods (e.g. how to develop assessments and use assessment tools) (Eren, 2010[17]; Aksit, 2016[18]).

The Ministry of National Education and the provincial directorates share responsibility for professional development

The Directorate of Teacher Training and Development and the ministry's provincial directorates share responsibility for developing and providing continuing professional development to teachers. Within the ministry, the different directorates are expected to work with the Directorate of Teacher Training and Development to develop training for

teachers on assessment. This includes workshops and seminars in which classroom assessment is foregrounded and other training on changes to the school curriculum which also includes components on assessment. The Directorate of Teacher Training and Development and the provinces also conduct regular assessments of teachers' learning needs (e.g. via questionnaires) to determine topics to be covered in new training sessions.

The continuous professional development offered by the ministry is free of charge for teachers and in most cases is optional (in-service training is sometimes mandatory, for example, linked to a teacher being re-assigned to a new post or as part of a continuing project). Where courses take place outside their school, teachers' participation is contingent upon the approval of a school principal. Participation rates in professional learning activities devoted to classroom assessment are not high, signalling a gap between demand, the availability of professional learning opportunities and areas of greatest need. Studies also show that teachers do not consider the workshops and seminars on assessment and the coverage of assessment in the curriculum training to be adequate and would like more practical content (Birgin, Tutak and Türkdoğan, 2009[19]; Günes et al., 2011[20]).

Policy issues

This chapter suggests assessment tools and feedback strategies that Turkey can develop now, with limited additional investment, which could have a significant positive impact on teachers' classroom assessment practice. Strengthening teachers' preparation in assessment theory and practice within teacher initial preparation and ongoing training will require time and significant financial and human resources. This review recommends that Turkey prioritise improving continuous professional development opportunities, as these have the potential to reach more teachers in ways that impact their immediate assessment practice. However, with large numbers of new teachers recruited each year, measures should also be taken now to improve the quality of assessment modules in initial teacher education to ensure that new teachers begin their career with a better understanding of assessment. Making fuller use of existing quality standards – notably the new teacher standards and accreditation requirements – would be a good first step.

Policy issue 3.1. Providing teachers with richer assessment resources that support competency acquisition

At present, the main sources of assessment guidance in Turkey are the subject curriculum and central regulations (see Table 3.1). Both set some general parameters for classroom assessments, but teachers need far more practical support on how to use assessments to monitor learning in line with national standards and to assess a broader range of competencies. Once developed, these kinds of resources can be made available on line via Turkey's new *EBA* portal, which currently provides limited tools but has the potential to become a valuable, accessible source of support for teachers across the country.

Recommendation 3.1.1. Help teachers to monitor learning in line with national standards

Fundamental to helping teachers assess and support learning is their understanding of the curriculum's expectations. At present, teachers' main reference for teaching and assessment are the learning outcomes in "gains tables" that list discrete knowledge and skills by subject. This contrasts with the learning standards in countries where a competency-based approach to teaching has been embedded, which emphasise the

application and integration of knowledge and skills. This review recommends that Turkey develop similar learning standards that focus on the development of more complex outcomes (see Chapter 2). This should be complemented by more guidance to help teachers integrate the standards in their daily teaching. Teachers reported to the OECD review team that they need more tools describing student performance to help them develop assessments and make fair and accurate judgements about student performance.

Teachers in Turkey will also need more practical assessment tools to be able to monitor learning against national standards and diagnose students' learning needs. The increase in repetition at the upper secondary level in Turkey suggests that many students in primary and lower secondary education move automatically to the next grade without having mastered the required knowledge and skills. This leaves many young adults at the end of their education in Turkey without important skills to enter the modern workforce. Results from the Survey of Adults Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC) shows that while most young Turkish adults can complete simple reading tasks such as locating information in a short text (PIAAC Level 1), nearly two in five 16-24 year-olds have trouble extracting information from longer and more complex texts (below PIAAC Level 2). This compares to 14% on average across OECD countries (OECD, 2016[21]).

Develop rubrics and exemplars to help teachers apply national learning standards in their classroom practice

Many OECD countries help teachers to apply learning standards by developing scoring rubrics. Rubrics contain descriptions of performance criteria and a scale of student performance levels to ensure that teachers are judging student work to a common standard. Countries also frequently provide exemplars of student work illustrating achievement at different levels. Rubrics help to ensure that classroom assessments reflect curriculum expectations, i.e. they are valid, reliable and support transparency (Nusche et al., 2011[22]); without them grading is more subjective and less inconsistent across teachers and schools. In Turkey, they would help teachers to prepare more accurate and reliable marking scales, where they have reported difficulties (Ak and Güvendi, 2010[23]).

Develop diagnostic assessments to ensure that students are meeting national standards

Turkey should consider providing teachers with simple diagnostic assessments that can be used at the beginning of a year, semester or unit of learning to ensure that students have the necessary skills and knowledge to master what is expected of them in the forthcoming unit(s). Diagnostic assessments are a type of formative assessment that assesses a student's starting point or baseline. The information is used to adapt future teaching and learning. Diagnostic assessments can also be used to identify students who are at risk of failing to identify particular needs and put in place additional support or learning strategies (OECD, 2013[6]).

Providing primary school teachers with diagnostic assessment tools is especially important. Recent reforms in the first grades of primary to replace numerical marking with qualitative descriptors are in line with recent changes in many OECD countries to encourage more formative assessment and focus on competency development in the early grades. This needs to be matched by providing teachers in Turkey with alternative assessment tools to ensure that children are meeting appropriate development and learning milestones. Helping teachers to understand where students are in their learning in these early grades is especially

important in Turkey since children begin school with very heterogeneous levels of learning. Less than half of Turkish children (44%) attend pre-school programmes, in contrast to the vast majority (90%) of young children in other OECD countries (Eurostat, 2012[24]). Increasingly in OECD countries, these programmes are aligned with the primary school curriculum, especially in the last year of pre-school education, to help ensure that children develop basic cognitive competencies to master the school curriculum, alongside important social and emotional skills (OECD, 2017[25]).

Introduce early grade assessments that are age appropriate with a clearly defined formative function

Teachers in Turkey might be provided with centrally-developed diagnostic assessments to determine children's educational levels when they begin school in Grades 1 or 2. These kinds of assessments carry no stakes for students and help teachers gather information about children's knowledge, skills and understanding and their developmental stage. Diagnostic assessments in these grades are also an important tool to detect any learning needs early on. Increasingly, OECD countries use diagnostic assessments in the early years of primary school since support to address difficulties or learning needs is more effective the earlier it begins (see Box 3.3).

Box 3.3. Diagnostic assessments in French primary schools

In **France** students who enter elementary school (*cours préparatoire*) are evaluated as part of a national diagnostic evaluation in French language and mathematics. The French language assessment focuses on basic literacy skills and knowledge and evaluates a student's ability to communicate orally, their phonological awareness and their knowledge of the alphabet. In mathematics, the assessment focuses on counting and reading numbers up to ten. The evaluation is a written assessment, with each student receiving a booklet where they respond to the questions. Teachers also receive a booklet that provides detailed guidance on how to administer the assessment to the whole class. Student booklets are collected in the end and evaluated by a student's classroom teacher.

The diagnostic assessment provides the teacher with information so that they can adapt their teaching practices to students' needs. It also provides school inspectors with information to understand the needs of the schools within their district, enabling them to provide relevant support to the teaching staff. The results are also shared with parents, and together parents and the student's classroom teacher discuss how to best support the student's learning and development needs. Results are also anonymised at the school-level and shared with the relevant district to provide direction for future professional development training for teachers.

Source: Ministère de l'Éducation nationale (2018[26]), *Évaluations Diagnostiques en CP [Diagnostic Evaluation in CP]*, http://eduscol.education.fr/cid119562/evaluation-diagnostique-en-cp.html.

Turkey would need to decide what form of diagnostic assessment is appropriate. Assessments should be designed in a way that is fun and engaging for children, without conveying any sense of a formal "test", while still providing accurate information. Some countries use computer-based assessments and given Turkey's commitment to promoting the use of technology in its schools, this may be an option in the longer term. In the short term, teachers might be provided with questions and prompts that they can use in an

informal way. The assessments would also contribute to teachers' assessment capacity by providing them with examples of how to use more formative types of assessments in the first grades of primary. The assessments should be accompanied by guidance for teachers on how to interpret the information to plan teaching and learning throughout the year to meet children's individual needs.

Similar, age-appropriate diagnostic tools might be progressively developed for teachers to use at the beginning of the year in the later stages of primary and at key stages in lower and upper secondary school. They would help to ensure that students do not move through grades accumulating major gaps in their learning, which at present is contributing to high repetition in upper secondary and low levels of skills acquisition. Again, these assessments should not carry any stakes for students. Recent initiatives introduced in association with Turkey's new education vision for 2023 – namely, the Student Learning Achievement Monitoring Assessment; the Turkish Language Skills Study; and the Common Examinations initiative – hold promise in this area[1].

Provide additional resources to address the needs of students identified as being at risk of falling behind

Teachers in classrooms where many students are identified as struggling will need extra resources so that they can help their students catch up. These resources will be particularly important in urban areas, where classrooms can be very large. Other types of support might include teaching assistants, who can have a positive impact on learning when they are well trained and work with a small group of students or provide one-to-one support (Sharples, Webster and Blatchford, 2014[27]). Students who are struggling can also be provided with additional learning opportunities before or after school, or over the summer. The ministry, in collaboration with the United Nations Children's Fund (UNICEF), is already piloting a Remedial Education Program for students in Grades 3 and 4 in basic literacy and numeracy competencies. Other options to extend learning support for students include making school staff available to help students with their homework or making rooms available for homework. Schools in Turkey provide these kinds of support less than most OECD countries (OECD, 2016[11]). This will be particularly important in the transitional years (Grades 8 and 9) to prepare students for upper secondary and support them in the often challenging first months.

Support teachers to use the results from standardised assessments to monitor learning

Introducing a full cohort national assessment in primary, and possibly in lower secondary, would signal to teachers and schools when student learning is not meeting national expectations, indicating if and where extra resources are needed. The assessments would also provide nationally aligned, external standards which teachers can use as a reference to improve the accuracy of their classroom assessments. If the national assessments are designed in line with the curriculum, they will also provide teachers with examples of how to assess competencies, improving the validity of teachers' classroom assessments over time. Teachers and schools might be supported through national reports and training on how to interpret assessment results so that they can use the results in this way (see Chapter 4). However, care should be taken to ensure that teachers use any information about individual student responses accurately. The General Directorate of Measurement, Evaluation and Examination Services would need to provide clear guidance for teachers around the extent to which student scores across different domains and skills (subscales)

and their responses to individual questions can be used accurately for individual diagnoses. Recent Student Learning Achievement Monitoring assessment initiative that was introduced in association with Turkey's new education vision for 2023 holds promise in this area.

Recommendation 3.1.2. Provide teachers with tools to assess a wider range of competencies

Internationally, classroom assessments are seen as an important complement to standardised tests because they can assess a broader range of competencies than one-off examinations (OECD, 2013[6]). This is especially important when examinations are based predominantly on closed format question items, as they are in Turkey. Teachers in Turkey need far more support to be able to use a range of different types of classroom assessments. Some teachers have highlighted that they lack information about how to use assessments to measure more complex, higher-order competencies (Demir, Öztürk and Dökme, 2011[28]). In particular, teachers need more support to develop and implement performance assessments where students have to construct an answer, produce a product or perform an activity, rather than choose the right answer among a set of predetermined options. These kinds of assessments like essays, presentations, experiments and portfolios assess not only students' knowledge and understanding, but also their ability to apply what they know to solve problems through critical thinking and reasoning.

Develop nationally validated assessment instruments

Nationally validated assessment instruments are developed centrally and connect to the curriculum's learning standards. Teachers can use the assessments on a voluntary basis for formative or summative purposes when they determine that their students are ready to be assessed for their acquisition of competencies in the curriculum (OECD, 2013[6]). In Turkey, the ministry does make comprehension tests linked to the curriculum for each subject and grade available on line but these tests are based on multiple-choice items (MoNE, n.d.[29]). As discussed above, closed format items like multiple choice questions can only assess a limited range of knowledge and skills, in contrast to the broadly-based competencies that Turkey's curriculum emphasises. Making available a wider range of nationally validated assessment instruments would address a number of issues associated with teachers' assessment literacy, including the reported practice among some teachers of borrowing assessment questions from the Internet without being able to ensure their validity and reliability (Kan, 2017[7]).

Provide guidance to support the development and implementation of classroom assessments

The above would need to be accompanied by assessment maps, which are descriptions of assessment tasks or methods that are most appropriate for assessing different learning outcomes in the curriculum. Also, of particular benefit in Turkey would be guidance regarding how teachers can incorporate formative assessment into their teaching practice and how they can develop and conduct authentic, performance-based assessments of competencies (e.g. portfolios, projects, group work, open-ended tasks, presentations, problem-solving assignments) (OECD, 2013[6]). The most helpful resources to support teachers' skills, for example in formative assessment practices and providing feedback are concrete, "living examples" of strategies that teachers have implemented effectively in similar circumstances (Hopfenbeck et al., 2013[30]; Wiliam, 2010[31]).

Develop and fully implement the e-portfolio

The ministry is already piloting student e-portfolios in 19 provinces. Portfolios refer to a collection of samples of student work from classroom activities. Many other OECD countries also use portfolios because they can document a broad range of competencies. Since portfolios draw on work produced in a normal classroom setting across multiple occasions, they should also provide a more accurate reflection of what a student knows and can do, rather than time-pressured tests. The process of developing a portfolio likewise offers opportunities for students to evaluate their own learning, as they must critically evaluate their work to select those which best demonstrate their abilities. Finally, since portfolios collect work over time they highlight individual student's growth and progress better than isolated test scores. However, portfolios can be difficult to implement nationally in a way that provides a meaningful and reliable assessment of learning.

In order to help teachers implement and use the portfolio, Turkey might consider providing national guidance for teachers on:

- **What is included in the portfolio by subject and type of task.** This might include a set of common performance tasks, for example, in a given year, each portfolio might include four writing tasks focused on different skills or tasks such as comprehension, analytical thinking and creative writing. Teachers could be provided with specific guidelines for each task and a rubric for marking. The set of tasks should cover a broad range of subjects and competencies.
- **How to organise portfolio interviews with students.** Accompanying portfolio development with teacher-student interviews can help to engage students' in their learning, and provide an opportunity for self-assessment. During an interview, a teacher may ask a student why they have chosen a particular piece of work, what they learned when they were undertaking this task and which aspects they might improve in the future.
- **How to use portfolios to develop individual student plans**. Beginning in lower secondary, portfolios might include a section where students are required to set their own goals, reflect critically on their progress, and consider future educational and career options. Teachers can use the portfolio interview to discuss students' future goals with them and provide them with practical advice to achieve them. In the final grades of lower and upper secondary, the discussions might focus more directly on future pathways, in consultation with guidance counsellors. A number of other OECD countries use similar approaches to encourage systematic reflection on a student's current performance and future goals (see Box 4.1, Chapter 4).

Students might also be encouraged to take their portfolios home, perhaps alongside their report cards twice a year, to encourage parents and students to talk about their work. Parents might be prompted – for example by teachers, in their biannual parent-teacher meeting, or through guidance in the portfolio – to talk with their children about the kinds of tasks that they enjoyed. This can help parents to engage with their children's learning, which positively supports student performance (Cooper et al., 2010[32]). From lower secondary onwards, parents should also be encouraged to use the individual student planning section of the portfolio to start discussing their children's areas of interests with them, and related future pathways and career choices.

Recommendation 3.1.3. Redesign the EBA portal to provide a broader range of better-quality resources

The establishment of the *EBA* portal is a positive sign that Turkey recognises the value of online supports. An online portal is a particularly effective medium for providing classroom assessment guidance and material to a sizeable, spread-out teaching population like in Turkey, especially given that over 97% of schools in the country have Internet access (World Bank, 2013[33]). The portal contains materials provided by the ministry and teachers. While it is very positive that the *EBA* portal serves as a platform for professional exchange among teachers, Turkey would benefit from using it more intentionally to improve teachers' assessment practices and the quality of assessments. In other OECD countries, ministries of education have invested significant resources to develop a variety of high-quality assessment resources that are made available on line (see Box 3.4).

Ensure that the ministry leads the development of EBA

Given the importance of providing teachers with high-quality assessment resources, the ministry should take a more leading role in redesigning the portal and developing content. Within the ministry, this would require collaboration across the directorates responsible for setting assessment requirements, as well as the Directorate of Measurement, Evaluation and Examination Services given its assessment expertise, and the Directorate of Teacher Training and Development given its responsibilities for teachers' continuous professional development and to ensure that the resources reflect the revised teacher competencies for assessment published in 2017. This work should also be developed in consultation with the Board of Education, to ensure that it is in line with national curricula.

Box 3.4. Online resources to support teachers' assessment practices in New Zealand

The New Zealand Ministry of Education's website includes a section devoted to classroom assessment that offers a range of resources to schools and teachers. These include:

- Assessment in the Classroom (http://assessment.tki.org.nz/Assessment-in-the-classroom), a collection of resources and information about formative assessment, including tools about how to put formative assessment into practice and inquire into the impact of teaching on students, as well as research literature on assessment for learning.
- Assessment Online (http://assessment.tki.org.nz/Assessment-tools-resources), an assessment tools and resources portal, which provides, among other supports: an assessment tool selector, which allows teachers to search for the most appropriate fit-for-purpose assessment tool for every grade and subject of the curriculum; assessment resource banks, offering over 2 500 assessment resources in English, mathematics and science; learning progression frameworks, which illustrate learners' developmental steps in reading, writing and mathematics from Years 1 to 10 of the country's school system; and assessment tools designed specifically to support learners with diverse learning needs.
- Using evidence for learning (http://assessment.tki.org.nz/Using-evidence-for-learning), which provides information and resources about how to collect and analyse high-quality evidence of student learning and achievement.

- Moderation (http://assessment.tki.org.nz/Moderation), which offers advice to schools about how to establish moderation procedures to improve the reliability of teacher judgements and the marking of assessments.
- Reporting to parents and whānau (http://assessment.tki.org.nz/Reporting-to-parents-whanau), which provides resources to support schools and teachers in reporting on student performance.

Source: New Zealand Ministry of Education (2017[34]), *Assessment Resources for Classroom Teachers and Students*, http://www.nzcer.org.nz/research/assessment-resources-classroom-teachers-and-students.

Involve teachers in the redesign of EBA

It will be essential for teachers to be involved in the redesign of *EBA* to ensure that the resources are useful for them. Turkey might create a consultation group that involves the ministry and representatives of the teaching community. In Denmark, for example, the government established a stakeholder group to develop the project "Strengthening Evaluation Culture in the *Folkeskole*" which included developing an evaluation portal (Schleicher, 2016[35]). Following the portal's launch in 2007, teachers' use of the portal was evaluated. In Turkey, the consultation group should also draw on existing evidence of teacher needs, such as the Directorate of Measurement, Evaluation and Examination's recent project on strengthening teacher capacity in classroom assessment. A survey of teachers' assessment needs in light of the new curriculum launched in 2017 should also be conducted.

While the ministry should take a lead role in developing *EBA*, it could continue to invite teachers to submit their own assessment tasks for posting on the portal. These tasks might be reviewed by individuals who are knowledgeable about what constitutes high-quality assessments that are appropriate to the curriculum. The ministry and teacher consultation group should develop a communications plan to make all teachers aware of the revised portal and how it will benefit them. As in Denmark, the ministry should consider evaluating teachers' use of the portal once it has been in place for at least a year, to ensure that it is providing useful resources for teachers.

Identify resources to be developed as a priority

As an immediate priority, the *EBA* portal should provide the following assessment tools developed by the ministry: scoring rubrics; diagnostic assessments to help teachers monitor learning in line with national standards; and guidance on how to use e-portfolios. The ministry can work with teachers to begin adding other resources that will be built up over time. These should include examples of student work demonstrating different performance levels in line with the national standards and a set of nationally validated assessment tools. These resources should be appropriate for teachers of different grades, subject areas, high school programmes and school contexts. Assessment instruments might also be adapted to take into account different teaching contexts, notably large classes.

This guidance might also be accompanied by videos and multi-media workshops. Videos are a valuable way to demonstrate effective classroom assessment techniques. Online workshops, which Turkey has already begun to use, provide teachers with opportunities to engage in distance learning. In Turkey, videos illustrating what formative assessment and feedback to improve student learning should look like would be of particular benefit to

address weaknesses in these areas. Individual teachers could participate in online workshops to develop assessment competencies to further their own learning and professional learning communities in schools could use these workshops as a form of collaborative professional development.

Policy issue 3.2. Using formative feedback and reporting to better support student learning

Studies have found that high-quality classroom feedback can accelerate learning significantly – students are able to learn in eight months what would normally take them a year. In particular, effective feedback has a powerful impact on lower achieving students (Wiliam, 2010[31]). Effective reporting instruments also play an important role in communicating learning expectations to parents, students and teachers, and supporting students' learning by identifying their strengths and weaknesses, as well as learning strategies to help them improve (Santiago et al., 2012[36]).

Teachers in Turkey need more support and encouragement to consistently use assessment results to give meaningful and formative feedback to students. In interviews with the OECD review team, secondary school students noted that while teachers reviewed summative assessment results with them, telling them for example which quiz answers they got right or wrong, teachers were not providing regular feedback on their learning. At the same time, while Turkey uses report cards and online systems to regularly communicate student performance to parents and students, student performance is not reported consistently according to national standards. Reporting also does not allow for qualitative feedback, including what students need to do in order to further their learning.

Recommendation 3.2.1. Encourage more formative feedback in the classroom

Formative feedback that is effective in supporting student learning is specific, descriptive and constructive (Looney, 2011[37]) and engages students in their own learning (see Box 3.5). In Turkey, there are a number of system-level factors that currently limit the space for teachers to undertake formative assessment and provide quality feedback. These include high-stakes national examinations, an overloaded curriculum and large class sizes. Recent reforms such as the 2017 curriculum revisions and decision to end the compulsory Grade 8 examination should help to reduce some of these obstacles, as will this review's recommendations for changes to the Grade 12 examinations (see Chapter 4). Equally, a national campaign that emphasises formative assessment and the development of 21st century competencies will also help to shift national perceptions as to what constitutes effective teaching and learning (see Chapter 2). But teachers will also need more practical help to integrate effective assessment practices into their classroom teaching.

Box 3.5. Effective formative feedback

The characteristics of effective feedback

To support student learning, effective feedback should be descriptive, constructive, timely and specific. Feedback that is descriptive and constructive clearly identifies students' strengths and areas for improvement. For example, teachers can present feedback in the form of a comment sandwich: compliment, correct, compliment. Feedback that is timely is provided either during the learning process or directly after an assessment of work. Finally, feedback should also be specific by being clearly connected to an explicit action, driving students towards achieving clear learning goals by making them do something specific to improve their work (BOSTES, 2016[38]).

Involving students in the feedback process

Effective formative feedback also involves students as active participants in their assessment. Generally, this means teachers discussing learning goals with students and sharing criteria for success with them. Teachers can use these criteria (or rubrics) to provide feedback to students regarding where they have succeeded and where they need to improve, and students can use them for self-assessment and peer assessment purposes (OECD, 2005[39]). This ensures that teachers and students share an understanding of the curriculum learning outcome or goal to which students are working, students' starting points in relation to that goal and how they should close the gap between the two (New Zealand Ministry of Education, 2017[34]).

Using student feedback to improve teaching

Effective feedback as part of formative assessment does not flow only from the teacher to students or, in the case of peer assessment, between students. It should also be directed from students to the teacher so that the teacher can use this information to adjust their teaching and determine when to move on to the next lesson. There are a number of simple techniques teachers can use to elicit this feedback at the end of each lesson, including asking students specific questions (e.g. What did you find easiest to learn?; What was difficult?; What would you do differently?) (BOSTES, 2016[38]) or having students complete "exit tickets", which are notes in which students write a few sentences describing their understanding of the lesson (AITSL, 2011[13]).

Sources: BOSTES (2016[38]), *Learning Assessment: A Report on Teaching Assessment in Initial Teacher Education in NSW*; OECD (2005[39]), *Formative Assessment: Improving Learning in Secondary Classroo ms*, http://www.oecd.org/education/ceri/35661078.pdf; New Zealand Ministry of Education (2017[34]), *Assessment Resources for Classroom Teachers and Students*, http://www.nzcer.org.nz/research/assessmen t-resources-classroom-teachers-and-students; AITSL (2011[13]), *Australian Professional Standards for Teachers*, https://www.aitsl.edu.au/docs/default-source/past resources/australian_professional_standard_fo r_teachers_final.pdf.

Help teachers to learn about and practice different feedback techniques

A number of OECD countries provide information online for schools and teachers to encourage high-quality and specific feedback to students (see Box 3.6). Turkey could use the *EBA* portal to make similar resources available. Studies show that resources that demonstrate visually what best practices look like – such as videos or written examples of effective feedback – are the most helpful for teachers, especially when they are associated with specific curriculum content (for example, how to provide feedback on mathematics or Turkish language learning at specific grade levels) (Darling-Hammond, Hyler and Gardner, 2017[40]). But alone, online supports will not be sufficient to help teachers understand the rationale for adopting different feedback approaches or provide them with expert feedback as they practice these approaches. As with other types of online professional development resources, the ministry and the provincial education directorates could provide face-to-face professional development workshops or seminars on effective feedback practices that complement online material. These sessions could present research on the impact of feedback and provide teachers with examples of practical feedback strategies for the classroom, along with suggestions of what teachers might do together to continue developing these new practices when they return to school.

Box 3.6. Website resources for effective feedback in Australia and New Zealand

Australian Institute for Teaching and School Leadership (AITSL), Australia

AITSL is responsible for maintaining the Australian Professional Standards for Teachers, which include a standard on assessment and sub-standard on student feedback. The AITSL website provides resources for schools to help them develop a school-wide culture that encourages the provision of effective feedback. These include summaries of research on practical feedback strategies and tools to support schools and teachers in implementing these strategies. The tools include documents and presentations that provide advice to schools to help them: confirm their readiness to introduce new feedback strategies; make a plan for implementation; enact the plan; and evaluate its impact. Resources also include video and written case studies, which provide "[r]eal-world insights into how feedback practices have been introduced into a range of educational contexts". Each case study describes a school's implementation steps, the key feedback practices they introduced, the enabling conditions that supported their efforts, and evidence of their impact.

The Ministry of Education's "Assessment in the Classroom", New Zealand

This website provides information to schools and teachers describing when the provision of feedback is most effective, resources to help teachers and students have conversations about feedback and links to relevant research. It also provides a professional learning presentation, which can be used to support individual teacher's learning or learning sessions organised by a school. The presentation describes the purpose and value of feedback, suggests that staff observe each other's classrooms to make note of the types of feedback they give to students and presents feedback strategies for teachers to try out in their classrooms. These strategies include:

- Ask key questions to engage students in feedback conversations and to check their understanding of the feedback and its adequacy (e.g. Do you know what to do next? Is that enough help? Do you need an example?).

- Try comment-only marking of students' work by, for example, describing two or three positives and what can be improved; research shows that, unlike grades, comments prompt student learning gains.
- Require students to show evidence that they have self-assessed their work before you look at it.
- Allow students time to act on feedback during lessons in order to reinforce the value of the feedback and to provide them with the opportunity to make revisions in a supportive environment.

Sources: AITSL (2011[13]), *Australian Professional Standards for Teachers*, https://www.aitsl.edu.au/docs/default-source/apst resources/australian_professional_standard_for_teachers_final.pdf; AITSL (2017[41]), *Collaborating to Support Improved Practice: Bray Park State High School, Feedback Case Study*, https://www.aitsl.edu.au/docs/default-source/feedback/aitsl-feedback-casestudy-braypark.pdf; AITSL (2017[42]), *Feedback, Australian Institute for Teaching and School Leadership*, https://www.aitsl.edu.au/teach/improve-practice/feedback; New Zealand Ministry of Education (2017[43]), Effective Feedback, http://assessment.tki.org.nz/Assessment-in-the-classroom/Assessment-for-learning-in-practice/Effective-feedback.

Resources and training will need to be adapted to a different classroom and school contexts in Turkey. Teachers need support in how to tailor formative assessment strategies like the provision of feedback to different age and ability groups, and also to different classroom realities (Dwyer and Wiliam, 2017[44]). For example, in large classes like those prevalent in certain urban areas of Turkey, useful strategies might include requiring students to record feedback from the teacher or their peers in portfolios, so that the teacher does not have to spend time on this task, and encouraging peer assessment and co-operative learning. Teachers can also be encouraged to divide large classes into groups of students in order to focus their attention on one group at a time and provided with support on how to develop lessons plans to manage this (OECD, 2005[39]). Older learners, in particular, may benefit from viewing examples of work that they can contrast with their own in order to identify where they need to improve (BOSTES, 2016[38]). Helping teachers to adapt their feedback approaches to different contexts will be important both for the effectiveness of these approaches for student learning, as well as for the likelihood of teachers embedding them in their daily classroom practice.

Provide school-level support for effective feedback

At the school level, teachers will need sustained support and encouragement to learn about and trial new practices in the classroom and develop their feedback skills over time, alongside other school-based efforts to improve teachers' assessment skills (see Chapter 4, Recommendation 4.3.2). School leaders can facilitate teachers' professional learning by providing opportunities to discuss feedback strategies and practice them in their classrooms, supporting teachers' participation in professional learning inside and outside school, and highlighting helpful resources, research and examples of effective practice (AITSL, 2011[13]). But in order for school leaders to take on this kind of pedagogical leader role they will need to be supported to develop their pedagogical and leadership capacities, alongside reforms to the role of the school leader, that will take time. In the short-term, directing school-level efforts to improve feedback might be led by experienced teachers such as the 'assessment leader' that this report recommends.

The ministry could also develop resources for the revised *EBA* portal that schools can use to help improve their assessment practices and use of feedback, including:

- Case studies that describe how different schools in Turkey have introduced effective feedback practices.
- Guidance for schools on how to organise staff learning sessions to work through online workshop material together and to trial practices in the classroom.
- Resources and practices to support school-based professional learning on effective feedback strategies.

The new assessment centres in the provincial education directorates might provide support to schools to improve the provision of feedback, among other classroom assessment practices.

Adapt teaching standards and regulations to ensure that formative assessment and feedback are central to teaching

Teachers will be encouraged to develop their skills for formative assessment and feedback if these are clearly communicated as important aspects of the teacher role and a teacher's professional competencies. Although Turkey's recently revised competencies include using assessment results to inform teaching and learning and providing constructive feedback both could be expanded and made more explicit. In particular, it is not specified that feedback should be provided to students (simply "stakeholders") and other aspects of formative assessment like undertaking assessments during the learning process without using marks to check for understanding are absent (MoNE, 2017[45]). Once revised, the competency on assessment should play a central policy in informing teacher policy, including teacher appraisal, the contents of initial teacher education programmes and professional learning programmes.

Central regulations for classroom assessment should also reinforce the importance of formative assessment. For example, this might mean that regulations require teachers to undertake at least one diagnostic assessment per semester or year, and specify that formative assessment is a regular and frequent aspect of classroom teaching. As part of teacher appraisal, teachers may be required to discuss or provide evidence of how they provide feedback to their students, and how they have used assessment results to shape future teaching and learning.

Recommendation 3.2.2. Use reporting to help parents and students better understand learning levels and next steps

Turkey's system for reporting student results includes report cards, the e-school system, an electronic parent information system and regular parent-teacher meetings. Primary teachers also make themselves available to parents who cannot attend formal parent-teacher meetings. At present, these reporting systems provide little space for qualitative feedback such as individual strengths and challenges or suggested learning strategies to achieve future learning goals. The e-school system does not allow for the inclusion of descriptive information on student performance, nor are teachers required to provide it in students' report cards. Teachers of Grades 1 to 3 have described the report card template for communicating student results as inadequate because it does not allow them to provide substantive feedback (Kan, 2017[7]). Qualitative feedback about students' performance and progress is essential to support student learning at all levels of schooling, but it is

particularly important in grades where students do not receive numerical marks based on summative assessments, as in Grades 1 to 3 in Turkey (Nusche et al., 2011[22]).

Report student performance against national learning standards

School report cards provide students with a descriptor in Grades 1 to 3, or a mark out of 100 in Grades 4 to 12. However, teachers across different classrooms and schools in Turkey vary in how they interpret both the rating scale and the numeric scale (Kan, 2017[7]). Parents and students are also not provided with common definitions of what the descriptors or marks signify. Turkey would benefit from developing reporting scales that clearly define student performance levels in relation to the national learning standards. Many other OECD countries use similar descriptive levels based on national learning standards to help students and parents understand how far students are meeting national or state expectations (see Box 3.7). In Turkey, this approach would also help to focus students, parents and teachers on the competencies that each student is developing and their individual progress, rather than comparing students with their peers in classes or the school.

Consider how to report the development of transversal competencies

The ministry should also consider how transversal competencies could be reflected in reporting documents. In France, the *livret scolaire* introduced in 2016 provides an annual report on the development of skills that contribute to the development of broader transversal competencies, alongside subject-specific skills. For example, when reporting on the development of the French language in the second year of primary, subject-specific skills like spelling and grammar are reported alongside broader skills like reading and understanding. The *livret scolaire* also reports on the development of knowledge to question and understand the world, like time and space. Every three years throughout a student's schooling, teachers report on the student's mastery of eight broad competencies including the tools and methods that students have acquired for their own learning and their development as an individual and citizen (Ministère de l'Éducation Nationale, 2017[46]).

Incorporate qualitative feedback when reporting student performance

Turkey should modify the format of the report card templates, e-school system and parent information system to allow for more qualitative feedback on student performance. Research recommends that reporting documents provide information about students' progress, strengths, areas where improvement is needed and any sources of concern, and recommendations for further learning to support students' continued progress (Santiago et al., 2012[36]). Turkey might also provide students and parents with space to add their own comments to reporting documents (see Box 3.7). This would involve students as active participants in their own assessment and support parents' role in their child's learning.

Box 3.7. The reporting framework in Ontario, Canada

Ontario's schools issue a progress report card and final report card for each student each year. The contents of the report card templates vary for Grades 1 to 6, Grades 7 to 8, and Grades 9 to 12, and for public and Catholic schools, but at the time of this review, all of them report on:

- students' learning skills and work habits (i.e. responsibility, organisation, independent work, collaboration, initiative and self-regulation)
- students' achievement against provincial curriculum expectations for each subject or course.

Guidelines outline the policies and practices district school boards, schools and teachers are required to follow in these areas and provides guidance to support completion of the report cards.

Reporting scales

A six-point letter grade scale is used for Grades 1 to 6 (see example), and 6-point numeric scales are used for Grades 7 to 8, and Grades 9 to 12, to report on students' achievement of provincial curriculum expectations in each subject or course. Each point on the achievement scale is accompanied by a descriptor and aligns with a provincial standard level, which is the reporting scale used for province-wide student assessments. This information is included in the report card templates to help parents and students understand students' results.

Letter Grade	Achievement of the Provincial Curriculum Expectations
A- to A+	The student has demonstrated the required knowledge and skills with a high degree of effectiveness. Achievement surpasses the provincial standard. (Level 4)
B- to B+	The student has demonstrated the required knowledge and skills with considerable effectiveness. Achievement meets the provincial standard. (Level 3)
C- to C+	The student has demonstrated the required knowledge and skills with some effectiveness. Achievement approaches the provincial standard. (Level 2)
D- to D+	The student has demonstrated the required knowledge and skills with limited effectiveness. Achievement falls much below the provincial standard. (Level 1)
R	The student has not demonstrated the required knowledge and skills. Extensive remediation is required.
I	Insufficient evidence to assign a letter grade

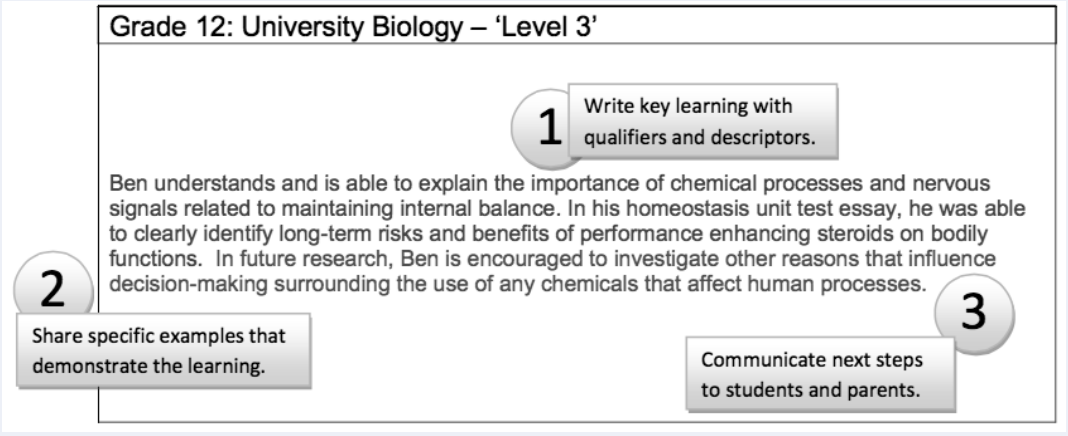
A four-point rating scale is also used to report on students' learning skills and work habits: E-excellent; G-good; S-satisfactory; and N-needs improvement.

Teachers' qualitative feedback

Report cards provide space for teachers to comment on what students have learned, their strengths, and their next steps for improvement in relation to their learning skills and work habits and their achievement of provincial curriculum expectations for each subject or course.

Reporting Period	Percentage Mark	Course Median	Credit Earned	Learning Skills and Work Habits						Comments Strengths/Next Steps for Improvement
				Responsibility	Organization	Independent Work	Collaboration	Initiative	Self-Regulation	
First										
Final										

Guidelines advise teachers on how to write these comments (e.g. use clear, precise language). A professional network in one region of the province has also developed a resource that provides teachers with examples of the kind of information the comments should contain.



Student and parent comments

At all grade levels, in either progress or final report cards, students are required to complete the statements: "My best work is" and "My goal for improvement is". Parents are prompted to indicate whether they would like to be contacted by the teacher(s) to discuss the report card results. In Grades 1 to 8, parents are also required to complete the statements: "My child has improved most in" and "I will help my child to".

Sources: Rushowy, K. (2017[47]), *Report Card, Curriculum Changes on the Way in Ontario*, https://www.thestar.com/news/queenspark/2017/09/06/report-card-curriculum-changes-on-the-way-in-ontario.html; London Region MISA PNC (2011[48]), *Comment Framework: Progress Reports and Report Cards*, http://www.misalondon.ca/PDF/a&e/Comment_Framework_Feb_2011.pdf; Ontario Ministry of Education (2010[49]), *Growing Success: Assessment, Evaluation and Reporting in Ontario Schools*, Ontario Ministry of Education, Toronto.

Clearly communicate changes to students, parents and teachers

These changes will require significant communication to teachers and schools. Teachers will need clear material that explains the rationale for the change. Guidelines will also be essential to ensure consistency in reporting practices across schools (Nusche et al., 2011[22]). Turkey might begin progressively, by piloting the new reporting instrument in selected schools and/or provinces. In 2009, Mexico developed a new reporting system to provide qualitative information to parents and students and used a new five-point marking

scale to describe students' level of performance in each subject. The report card template was piloted in 5 000 primary schools and 1 000 lower secondary schools (Santiago et al., 2012[36]). Care will also need to be taken to communicate clearly the change to parents to help them interpret the information in the new report card. As well as sending students' e-portfolio home alongside the report card, efforts to communicate the changes to the school report card might be part of a wider public campaign that explains changes to teaching and learning as part of a competency-based approach (see Chapter 2).

Policy issue 3.3. Reinforcing in-service training on assessment

Teachers in Turkey participate in professional development far less than teachers in other OECD countries (OECD, 2016[11]). Participation in assessment-related professional development is especially low – between 2012 and 2016 less than 1% of teachers in Turkey attended courses and seminars on classroom assessment (MoNE, 2016[50]; MoNE, 2017[51]). The OECD review team's interviews with teachers suggest that low participation is due to the perceived low quality and relevance of courses, and also because it is disruptive since teachers frequently have to attend courses outside the school during classroom hours. Studies in Turkey confirm this view (Günes et al., 2011[20]).

An important complement to courses and training on assessment are the learning opportunities provided within schools. Turkey already has some school-based discussion groups on assessment, but these are largely limited to developing summative assessments. Providing external support so that experienced teachers within each school can become an "assessment leader" would provide each school with assessment capacity and the impetus to help each school create its own policy towards assessment. Such a policy would make explicit for teachers what good assessment practice is and how they can integrate it in their classrooms.

Recommendation 3.3.1. Make training on classroom assessment a top professional development priority

Continuing professional development on classroom assessment is currently offered in response to demand, as determined by needs assessments (e.g. regular teacher questionnaires) conducted by the ministry's Directorate of Teacher Training and Development and provincial education directorates. Except in a few specific circumstances, such as when a teacher is re-assigned to a new position, professional development is not mandatory. While this voluntary approach respects teachers' authority to determine their own professional learning needs, something that the ministry has identified as important (MoNE, 2017[5]), this method has clearly been inadequate.

Require all teachers to undertake professional development on assessment

Given the need to significantly improve overall teaching competencies, and assess competency in particular, all teachers in Turkey should be required to undertake some professional development annually. Within this requirement, assessment should be highlighted as a core domain where teachers are encouraged to continually develop their knowledge and expertise. Turkey could do this by setting out the minimum number of hours or days that teachers are expected to devote to professional development, as is the case in ten education systems across Europe (European Commission/EACEA/Eurydice, 2015[52]). Requirements should also specify that teachers should draw on both courses provided externally to their school and on-going, school-based professional development. The latter are particularly important because research shows that sustained, collaborative professional

development directly related to teachers' classroom practice are among the most effective types of professional development (Schleicher, 2011[53]).

As recommended by this review, setting out minimum expectations for teachers' assessment competency and using teacher appraisal to identify professional development requirements would help to ensure that teachers undertake professional development relevant to their needs. During their appraisal discussion, teachers would be expected to reflect upon how they are drawing on what they have learned in the classroom. Introducing a new appraisal for promotion, as part of a differentiated teaching career path in the future, would incentivise teachers to develop and demonstrate higher levels of assessment competency.

Ensure that professional development reflects teachers' needs

To improve the quality and relevance of professional development, it should closely address teachers' assessment needs. Currently, Turkey surveys teachers to inform the design of professional development. This helpfully focuses on where teachers feel they need further support, but requires teachers to diagnose their own needs, risking that teachers may not accurately identify their key needs. More direct evidence that reveals gaps in teachers' assessment knowledge and skills would help to ensure the relevance of professional development. This could include similar workshops like the one recently organised by the General Directorate of Measurement, Evaluation and Examination Services and UNICEF, where teachers were asked to respond to questions about assessment terminology and how they use assessment. Better use should also be made of evidence from teacher appraisal and school evaluation on teachers' learning needs for assessment.

Connect professional development to teachers' classroom practices

In designing professional development, efforts should be made to directly connect content with teachers' classroom practices, which research highlights is critical for its effectiveness (Darling-Hammond, Hyler and Gardner, 2017[40]). This will mean providing opportunities for active learning where teachers can try out the assessment practices that they aim to use with their students and receive feedback, rather than lecture-based training that is disconnected from teachers' classrooms and students. Teachers also need practical and specific examples of what effective assessment practice looks like, for example by looking at model lesson plans that indicate how and when teachers will check for students' understanding, or by observing the provision of high-quality feedback through classroom observations or videos.

Make professional development more responsive to national priorities to reduce summative testing

Recent national regulations aim to reduce teachers' reliance on summative testing, for example by ending the use of summative, numerical marking in Grades 1 to 3 and reducing the number of multiple-choice tests that can be used in secondary education. This review has recommended that the ministry develop new assessment tools, like diagnostic assessment, student portfolios and items banks of assessments items, so that teachers have a broader repertoire of assessment tools to complement these regulations (see Policy issue 3.1). But teachers will need support through professional development to help them understand the purpose of these tools and how they can be used to support learning if they are to make greater use of them, and rely less on summative testing. Professional

development should also give teachers the opportunity to practice using new assessment tools and receive feedback.

Develop facilitators' assessment expertise

Developing more relevant, high-quality professional development will also depend on having high-quality facilitators who can deliver it. At present, professional development is delivered by school inspectors, ministry staff and university faculty members. To be effective, facilitators responsible for delivering professional development need to have practical knowledge of Turkey's classrooms and strong assessment expertise. However, half of the teachers in a small Turkish study reported that they did not trust the expertise of facilitators (Günes et al., 2011[20]). Teachers have expressed particular concerns about the training delivered by inspectors because they were considered to be lacking both expertise in the subject matter and recent experience in the classroom.

One way to enhance the capacity of facilitators in the immediate term would be to require that they participate in the same continuing professional development courses made available to teachers. This is the case in Norway and helps to ensure that facilitators' preparation relates to the classroom (European Commission, 2013[54]). A core function of the new assessment centres in the provincial education directorates might be to train facilitators on assessment. When they are established, the new teacher academies could also take on a role in training facilitators (Box 3.1).

Make greater use of technology to expand professional development

In order to significantly expand the availability of professional development, Turkey will need to consider using a broader range of delivery options. As part of the new Teacher Strategy 2017-23, the country already plans to create new teacher academies that will provide professional development to teachers, which could help. Another option is to make much greater use of technology to provide professional development that is blended with face-to-face training to reach the large and geographically disparate body of teaching staff in Turkey. Research from other countries that have used this model highlight the importance of face-to-face learning to orient teachers before they begin and ensure clear guidelines, like firm deadlines to ensure that teachers complete the courses (Dionísio, Cunha and Arqueiro, 2016[55]; Kovacs, 2016[56]).

Online materials can also be designed to provide similar opportunities for interactive learning and practical examples that are important in more traditional types of professional development. For example, videos could also be used to illustrate effective assessment practices. Classroom contexts could also be simulated to require teachers to put what they have learned into practice, for example by indicating the kind of feedback that they might provide to a student or writing a plan for how they would assess learning in a given topic. To ensure the quality of these materials, Turkey might ensure that any new standards for professional development include specific standards for online materials.

Proceed with plans to adopt standards for effective professional learning

As part of the new teacher strategy, Turkey also plans to create standards for the new teacher academies and their facilitators. This will be an important quality assurance measure, especially if the range of professional development providers is to expand in the future to include private providers, as Turkey is considering. In Ontario, Canada, for example, providers of additional qualification programmes for teachers must meet certain regulated standards in order to be accredited by the Ontario College of Teachers. These

requirements include that the majority of educators teaching the programme have teaching experience in Ontario relevant to the programme (Ontario College of Teachers, 2002[57]).

Recommendation 3.3.2. Develop school-based professional learning on assessment

Professional learning opportunities that are job-embedded, collaborative and sustained over time are the most effective at improving teachers' competency (Schleicher, 2011[53]). These include opportunities at the school-level like group discussions about teaching activities, joint preparation of instructional material, classroom observations and coaching (Darling-Hammond and Rothman, 2011[58]). These activities allow teachers to learn and practice over an extended period of time within their school and classroom environments. Providing support at the school-level in this way also makes it easier for teachers to fit this learning into their schedules and receive support on assessment when they need it (OECD, 2013[59]). It would also support the professional learning of teachers in Turkey's rural, isolated schools.

Turkey already has some school-based discussion groups on assessment, but these could be improved so that they encourage more the kinds of collaborative reflection, inquiry and experience sharing that will help to improve teachers' assessment practices. Schools in Turkey will need actors at the school level that can help to organise these kinds of groups, with the assessment expertise to be able to direct the discussions. Teachers will also need to be encouraged to see these kinds of activities as a legitimate and important use of their time. Finally, to ensure that collaborative activities are useful, they need to be directed to focus on shared challenges that teachers are facing in the classroom.

Provide leadership for school-level professional development activities on assessment

Schools will need impetus and support to be able to create collaborative activities that help teachers to use assessment more effectively. This can be provided through a range of actors within and outside the school such as:

- Designating an experienced teacher(s) as an assessment leader or coach in each school. This individual would act as an "assessment resource" for the school by organising and directing teacher discussion groups and helping teachers navigate the online assessment materials and resources so that they can draw on them effectively to meet their particular needs as a school. Assessment leaders could receive some initial training and support from the assessment centres in the provincial directorates to enable them to take on this role.
- Using the assessment centres to develop the provincial directorates' assessment capacity, for example providing training to school inspectors on assessment use. This would mean that over the medium-term, the directorates' capacity would grow so that they can provide more support to facilitate and direct schools' professional development on assessment.
- Using school evaluation to "challenge" schools on their assessment practices (see Chapter 5).
- Providing targeted and integrated support to schools in greatest need. The wide disparities in student outcomes across different regions and types of schools in Turkey mean that some schools will need far more support to improve teaching and

learning. Turkey could provide integrated, targeted support for these kinds of schools like more external support from local assessment centres (see Chapter 5).

Finally, school leaders can play an instrumental role in planning professional development activities at the school level and developing collaborative working cultures (Schleicher, 2012[60]). In Turkey, where school leaders occupy a primarily administrative role at present, they will need significant support to become pedagogical leaders, including reform of the school leader role in terms of selection, initial preparation and appraisal to focus on pedagogical and leadership competencies.

Provide dedicated time for teachers to work together on assessment

Evidence from the OECD Teaching and Learning International Survey (TALIS) shows that internationally, engaging in collaborative professional development activities or collaborative practices five times a year or more has a positive impact on teachers' perception of their own efficacy and their job satisfaction (Schleicher, 2015[61]). Since teachers in Turkey spend less time teaching than their counterparts in all other OECD countries except one (Poland) (OECD, 2017[62]), they may have time to dedicate to these kinds of collaborative activities, However, they will need to feel that is a legitimate and valued use of their time.

This can be supported by requiring all teachers to engage in some kinds of collaborative activities. In Japan, for example, all teachers participate in lesson studies where groups of teachers review their lessons and discuss how to improve them, in part through analysis of student errors (Schleicher, 2012[60]). In Singapore, 20 hours per week are built into teachers' schedules for shared planning, learning and classroom visits (Darling-Hammond and Rothman, 2011[58]). Given the centralised organisation of education in Turkey, encouraging more collaborative activities might require specifying that teachers devote a certain proportion of their time to these kinds of activities. Recognising teachers' participation in school-based collaborative activities as part of teacher appraisal criteria will also help to ensure that teachers and school leaders recognise the importance of these activities.

Develop school-based moderation practices

The teacher groups in Turkey's schools should be encouraged to focus on issues that matter to teachers and which are important for their classroom practice. Assessment leaders in schools might initially work with their local provincial directorates to help identify the kinds of issues that are important nationally but also reflect the local and school context, for example by drawing on the results from school evaluations. Important and useful areas to focus on in the short term include how to diagnose student learning at the beginning of the school year using the new diagnostic assessments, how to use the new student portfolios effectively and how to moderate student work across the school. The latter brings teachers together to discuss the standard of student work and review marking procedures to encourage consistency in teachers' judgements of student work. It is particularly important in Turkey, given variations in teachers' classroom assessment because it can help to improve the reliability of teacher assessments across a school. It is also an important form of collaborative professional learning that encourages teachers to reflect on and deepen their understanding of student assessment, learning goals and performance criteria (Nusche et al., 2011[22]).

To support the development of school-based moderation practices, the ministry might provide external resources for schools. In New Zealand, the Ministry of Education has

provided school teams moderating assessments in reading, writing and mathematics with resources that include:

- Questions for schools to consider in establishing moderation procedures (e.g. who should lead the moderation and how? How can we ensure our procedures are consistent? To whom can we turn for help?).
- Examples of moderation practices drawn from the research literature.
- Case studies of effective moderation teams.
- Online professional learning modules for teachers describing why moderation is important and how it can be conducted (New Zealand Ministry of Education, 2017[34]).

Policy issue 3.4. Improving teachers' initial preparation in classroom assessment

Good quality initial teacher preparation on classroom assessment ensures that teachers start their career with a sound understanding of different assessment approaches and the confidence and skill to use these appropriately. In Turkey, this solid foundation is particularly important because new teachers are often assigned to rural, disadvantaged areas, where drop-out rates are higher and students have lower basic skills and face other forms of disadvantage (see Chapter 1). In these contexts, effective classroom assessment (especially formative assessment) can have a substantial impact on learning outcomes (Looney, 2011[37]) and student motivation. Initial teacher preparation can also be a powerful vehicle for education reform, to ensure that the next generation of teachers can assess the competencies valued in the new curriculum and modern societies. Again, this is important in Turkey, where a significant number of new teachers will need to be recruited to respond to system expansion, especially at the secondary level.

At present, Turkey's initial teacher education programmes include a measurement and evaluation course, and assessment is also covered as part of pedagogical content courses However, teacher graduates are reported to lack knowledge of the assessment approaches required by the constructivist curriculum, including alternative assessment methods like portfolios (Aksit, 2016[18]). They also have difficulty understanding how these assessment approaches can be applied in the classroom (Eren, 2010[17]). Interviews carried out by the OECD review team confirmed this research, with policymakers reporting that initial teacher education is more theoretical than practical, leaving teacher candidates with insufficient preparation in the application of assessment methods like how to use assessment tools or write assessment questions. The Council of Higher Education is developing a new module on classroom assessment for initial education programmes and the ministry's Teacher Strategy 2017-23 states that efforts will be made to make initial education programmes more practical. However, since the Council of Higher Education sets the requirements for initial teacher education, the ministry has limited ability to ensure that the new module is aligned with its Teacher Strategy and addresses classroom needs and national curriculum goals.

Recommendation 3.4.1. Ensure sufficient coverage of classroom assessment in initial teacher preparation

Setting clear standards, through assessment competencies and accreditation, will be important in Turkey given that multiple bodies exercise authority in this area. This will help to create a framework that ensures the quality of initial teacher education programmes

and their alignment to national priorities. Ensuring that these standards reflect the importance of practical preparation in classroom assessment will also help to ensure that this is embedded in the curriculum of initial teacher preparation.

Use new teacher competencies to inform the development of initial teacher education programme content on assessment

Turkey's teacher competencies have reportedly never been used to inform the curriculum of the country's initial teacher education programmes (Köksal and Convery, 2013[63]). While Turkey has recently developed new teacher competencies, these do not reflect all the important aspects of teachers' assessment competencies like using a broad range of assessment types or clearly specifying expectations for formative assessment. They also do not provide specific expectations in terms of what beginning teachers need to know and understand classroom assessment (MoNE, 2017[45]). Turkey will need to consider addressing these gaps, as recommended in this review (see Chapter 5). This would mean that the Council of Higher Education and initial teacher education providers could then use the new teacher competencies to inform the development of initial education programme content on assessment. They could also be incorporated into the country's accreditation requirements.

In so doing, Turkey could look to Australia's professional standards for teachers, which include assessment-related standards for graduate teachers, as well as the work of the Board of Studies, Teaching and Educational Standards (BOSTES) (now the New South Wales Education Standards Authority), the initial teacher education programme accreditation body in New South Wales, Australia. In 2013, BOSTES conducted a study to determine how the state's initial teacher education programmes were covering student assessment and reviewed the research literature identifying gaps in teachers' student assessment competencies in Australia. BOSTES then established 24 key elements of assessment knowledge, skills and understanding, or competencies, that beginning teachers should develop in their initial teacher education programmes (see Box 3.8). These elements provided a framework for assessment content that initial education programme providers are now expected to cover in their programmes.

Box 3.8. BOSTES' key elements of assessment knowledge, skills and understanding for beginning teachers

Below is a selection from the 24 key elements of knowledge, skills and understanding that BOSTES determined new teachers needed to develop in their initial teacher education programmes in the area of classroom assessment. These key elements expand on the Australian professional standards for graduate teachers, which set out what new teachers should know and be able to do in relation to assessment. They emphasise, in particular, that new teachers need to be able to conduct assessments that are appropriate to the state's school curriculum.

- Beginning teachers need to understand how teaching, learning, assessment, feedback and reporting can be aligned and integrated in practice.
- Beginning teachers need to know the purposes of summative and formative assessment and how the two can be brought together. They need to know how to incorporate both purposes for assessment into teaching and learning programmes.

- Beginning teachers should have a working knowledge of the vocabulary of assessment. They should understand and be able to apply concepts of validity and reliability to the development of their own assessment activities and tasks and to broader measures such as examinations and standardised testing programmes.
- Beginning teachers should understand the importance of developing criteria for judging different levels of performance in response to assessment activities or tasks.
- Beginning teachers need to be able to formulate questions to help them analyse student performance for feedback to students and, just as importantly, to feed forward into their teaching.
- Beginning teachers should know about ways that the reliability of their judgements can be improved, for example through moderation.

Source: BOSTES (2016[64]), *Board of Studies Teaching and Educational Standards New South Wales*, www.boardofstudies.nsw.edu.au (accessed on 15 January 2018).

Implement the tertiary accreditation process, and incorporate new teacher assessment competencies into the accreditation requirements

In 2005, Turkey established a cyclical, five-year external accreditation process for tertiary education institutions requiring initial teacher education programme providers to demonstrate that their programmes meet certain standards. This included one standard that references classroom assessment, which includes being proficient in the monitoring and evaluation of students' learning and development. However a decade after the accreditation process started to be developed, it has still not been finalised (EPDAD, 2016[15]; Kamal, 2017[16]). In interviews, the OECD review team was told that the quality of the country's consecutive initial teacher education programmes varies, more so than that of the concurrent programmes. This may be leading to disparity in how well teacher candidates, particularly those in consecutive programmes, are prepared in classroom assessment.

Turkey should proceed with the systematic implementation of its cyclical tertiary accreditation process and incorporate new teacher assessment competencies into the accreditation requirements. Providers could, for example, be required to demonstrate how they will develop teacher candidates' knowledge of the theory underpinning assessments (and the school curriculum to which they relate) and their practical skills to conduct assessments. This would address any disparity across programmes while also ensuring teacher candidates' sufficient and appropriate practical preparation in classroom assessment. Such an approach would be consistent with the practices of education systems around the world that have established decrees, frameworks or guidelines to which initial teacher education providers are required to adhere. These include New South Wales (Australia) (see Box 3.8), the French and Flemish communities in Belgium, Ontario (Canada), Ireland, Norway and Sweden (see Box 3.9) (OECD, 2013[6]).

Establish an advisory committee with representatives from the ministry and the Council of Higher Education to enhance the initial preparation of teachers

In working to establish requirements for the coverage of classroom assessment in initial teacher education programmes, Turkey will need to address a systemic challenge: separate bodies that do not necessarily work closely with each other are responsible for tertiary

education, accreditation, teacher training, classroom assessment policies and the school curriculum. These include: several bodies within the Ministry of Education; the Council of Higher Education; the National Council for Teacher Training, which is tasked with co-ordinating between the ministry and the council; and EPDAD (YÖK, 2015[65]; OECD, 2013[66]; OECD, 2007[3]).

Turkey should consider establishing an advisory committee with representatives from each of these organisations, like the one Ireland created to revise its initial preparation of teachers, to work together to address the difficulties associated with the governance of initial teacher education (see Box 3.9). On an ongoing basis, this advisory committee could also ensure that initial teacher education programmes keep pace with reforms to the basic education system. The importance of ensuring that representatives of initial education providers are included as full partners in this collaborative process cannot be overstated. Teachers and principals will also have valuable input to contribute. If appropriate, the National Council for Teacher Training could chair the committee. This would reinforce both the council's important role as a bridge between the bodies responsible for basic and tertiary education and the goal of these efforts: the effective training of the next generation of teachers.

Box 3.9. Ireland's initial teacher education criteria and guidelines

In 2010, the Teaching Council in Ireland, which accredits initial teacher education programmes, established an Advisory Group on Initial Teacher Education as part of the country's efforts to revise initial teacher education by engaging relevant stakeholders and co-ordinating their input. The advisory group consisted of representatives from the Teaching Council, Ireland's Department of Education and Skills, initial teacher education providers and schools. Its main responsibility was to advise the council on new criteria and guidelines to be followed by providers of initial teacher education programmes. The group also formed a bridge between the Teaching Council's policy and the development and implementation of initial teacher education programmes.

The criteria and guidelines the Teaching Council established emphasise that programmes should prepare teacher candidates "for teaching, learning and assessment" related to the school curriculum. Specifically, a number of criteria and guidelines highlight preparation in classroom assessment. For example, initial teacher education providers must ensure that:

- Teaching, learning and assessment are mandatory elements of the programme.
- School placements provide opportunities for teacher candidates to practice teaching, learning and assessment using a wide range of strategies.

- Graduates of initial teacher education programmes achieve knowledge of key principles of planning, teaching, learning, assessment, reflection and self-evaluation (e.g. knowing the theory, concepts and methods of formative and summative assessment; understanding students as active learners). Graduates should also have developed skills in planning, teaching, learning and assessment (e.g. using a range of strategies to assess students' progress; assessing students' achievement of curriculum objectives and adapting their teaching accordingly).

Source: The Teaching Council (2017[67]), *Initial Teacher Education: Criteria and Guidelines for Programme Providers*, http://www.teachingcouncil.ie/en/Publications/Teacher-Education/Initial-Teacher-Education-Criteria-and-Guidelines-for-Programme-Providers.pdf.

Recommendation 3.4.2. Ensure that initial preparation in classroom assessment is practical and connected to the school curriculum

It is positive that Turkey's initial teacher education programmes include mandatory coursework on measurement and assessment. However, the extent to which classroom assessment is also covered in the practicum and courses on the teaching methods or practical didactics of different subjects of the curriculum is not clear. This may be one reason why teachers reportedly consider that initial preparation in classroom assessment is not sufficiently practical. Best practice in how assessment is used varies across curriculum subjects, making it particularly important that teacher candidates be prepared in classroom assessment in ways that are practical and connected to the curriculum they will be teaching.

Cover classroom assessment in the practicum

In Turkey, accreditation requirements set out standards for delivery of the practicum component of initial teacher education programmes. They are general in describing what should be covered in the practicum (e.g. classroom management; performance), and they do not reference classroom assessment (EPDAD, 2016[15]). Since the late 1990s, Faculty School Co-operation Guidelines have set out expectations for initial teacher education providers and schools in relation to the practicum. The guidelines are reportedly unclear regarding a number of processes, and as a result, implementation of the practicum varies from programme to programme (Gürsoy, 2013[68]). New teachers in Turkey also have a much shorter practicum than their peers in other OECD countries. New teachers for lower secondary in Turkey, for example, have a 30 days practicum which is the lowest among all OECD countries except one (Japan) (OECD, 2014[69]).

The practicum should provide teacher candidates with multiple opportunities to put what they have learned about classroom assessment into practice in ways that are directly connected to the school curriculum. Teacher candidates should also receive feedback and be assessed on their classroom assessment efforts and have opportunities to reflect on them. New Zealand emphasises preparation in classroom assessment during the practicum, as well as during the initial induction phase of teaching (Nusche et al., 2011[22]). A practicum handbook for the University of Auckland's primary initial teacher education programme, for example, specifies learning outcomes and criteria to evaluate teacher candidates on their classroom assessment practices. Teacher candidates in their final in-school placement are expected to demonstrate that:

- Their planning is informed by the curriculum, policy documents, appropriate learning and teaching approaches, inclusive practice and current assessment information.
- They are consistently monitoring, analysing and evaluating students' learning using a range of assessment procedures.
- They are planning, implementing and evaluating extended teaching/learning experiences across a range of curriculum areas with multiple groups and the whole class (University of Aukland, 2017[70]).

In Turkey, the advisory committee should consider revising the accreditation requirements and Faculty School Co-operation Booklet in order to clarify practicum requirements and ensure that teacher candidates use their time in the classroom to conduct classroom assessments, as well as receive feedback and be assessed on them. Turkey should also consider lengthening the duration of the practicum to provide teacher candidates with more practical teaching opportunities.

Model the assessment practices teachers will need to use in the classroom

Initial teacher education programmes can develop teacher candidates' understanding of the specific assessment methods they will be expected to conduct in the classroom by using some of those same methods to assess teacher candidates during their initial preparation. Research in Turkey has found that teacher candidates who adopt a critical thinking learning strategy (e.g. consciously analysing, reasoning and using knowledge to solve problems), which is encouraged in the school curriculum, preferred alternative assessment methods (Dogan, 2013[71]). A small study found that the use of portfolios for assessment in initial teacher education programmes put "the constructivist philosophy…into practice," and encouraged teacher candidates to be active learners and faculty members to be more student-centred (Aksit, 2016[18]).

This can be encouraged systematically through the accreditation requirements for initial education programmes which should explicitly include the modelling of assessment methods relevant to the school curriculum. In Ireland, the criteria and guidelines for accreditation for initial teacher education providers require initial teacher education providers to model the active teaching methods they would like teacher candidates to emulate and to involve teacher candidates in activities similar to those they will use with their students (The Teaching Council, 2017[67]).

Build the classroom assessment capacity of initial teacher education providers

It is important that teacher candidates are exposed to education faculty members who have an understanding of the realities of Turkey's classrooms and expertise in student assessment. There are indications that faculty members in Turkey may not possess this knowledge and experience. The OECD review of Turkey's basic education system (OECD, 2007[3]) found that the initial teacher education faculty did not work closely with schools because of the demands of their university work. In interviews with stakeholders during the current review, the team heard that there are a limited number of graduates in assessment and evaluation in Turkey and that not every university has an expert in this area.

Turkey could employ a number of different measures to ensure that initial teacher education providers have the necessary capacity in classroom assessment methods relevant to the school curriculum. The Council of Higher Education and the ministry could encourage the development of strong assessment-focused networking and research links among initial

teacher education providers, and between providers and schools. The Norwegian Network for Student and Apprentice Assessment provides an example of a similar network aimed at building assessment capacity among teacher training institutions. Each training institution designated its own assessment experts to work with teacher education faculty on assessment. This initiative also stimulated research and development in assessment, connecting staff of teacher training institutions with international assessment experts (Nusche et al., 2011[22]).

In Turkey, this kind of network might involve strengthening the relationships that already exist between universities and the schools in which they place their teacher candidates for the practicum. Within these networks, faculty and school staff should be encouraged to meet regularly to exchange information and ideas about assessment and to collaborate on assessment-related research projects. This would be consistent with the government's aims in its recent Teacher strategy (MoNE, 2017[5]) for initial teacher education instructors to conduct more research and observations in schools. Through accreditation requirements, initial teacher education providers can also be encouraged to employ faculty who have studied evaluation and assessment at an advanced level and to consider offering lecturing opportunities to practising teachers who are seconded from their schools (Coolahan, 2002[72]). Turkey will need to ensure that there are sufficient places available nationally in master's programmes in assessment subjects like psychometrics so that there are qualified people to take on these roles in initial teacher education programmes. Initial teacher education faculty members can also be invited to participate in the same types of professional development opportunities on curriculum and classroom assessment that are provided to teachers.

Use the induction period to continue developing the capacity for assessment

During the induction period for new teachers in Turkey, more experienced supervisor teachers provide new teachers with advice and feedback. New teachers are also required to participate in 168 hours of seminars on the education system, teaching and legislation (MoNE, 2017[8]; ERI, 2017[73]). However, professional learning on classroom assessment does not appear to be a feature of the induction. It is unclear whether guide teachers are instructed to work with new teachers on their assessment practices. The seminar topics are broad, so it seems unlikely that they cover classroom assessment in-depth.

The MoNE'S Directorate of Teacher Training and Development should consider how induction could better build new teachers' capacity in classroom assessment. Ontario, Canada, provides an example of an education system where classroom assessment is covered in the province's one-year, school-based induction programme (see Box 3.10). In Turkey, this could include the development of seminar content on classroom assessment based on assessment competencies for new teachers, as well as areas of need identified by teacher candidates. It could also include the development of learning material and tools to help guide teachers and principals to talk to teacher candidates about their assessment practices and provide them with feedback and advice to improve.

Conclusion

Turkey has already recognised the need to better support teachers in the use of assessment. At the same time, changes in 2017 – aimed at reducing the dominance of the high stakes examinations and improving teachers' professional competencies through a new teacher strategy – will address some of the systemic challenges that have hindered teachers' ability to use a range of assessments to effectively support learning in the past. This provides a

strong foundation for the country to start implementing the changes that will help Turkish teachers use assessment to improve outcomes in a range of ways, from helping teachers track who is falling behind, to making students more conscious of their learning strategies, to concentrating more attention on critical 21st century competencies.

Box 3.10. Professional learning on classroom assessment in Ontario's new teacher induction programme

In Ontario, Canada, the New Teacher Induction Program (NTIP) requires district school boards to provide professional development to new teachers on topics they have identified as areas of need, including "planning, assessment and evaluation", as well as topics related to provincial education initiatives. The Ministry of Education provides school boards with funding for the programme, including funding for supply teacher release time so that new teachers and their trained mentors have opportunities to observe each other's classrooms and engage in professional learning together.

The Ministry of Education has developed resources for school boards and educators to support new teachers' professional learning on "planning, assessment and evaluation". These include a list of the core content school boards should cover in the professional development for new teachers, such as:

- Selecting and using classroom assessment strategies that are appropriate to the curriculum and learning activities, to inform instruction and plan appropriate interventions.
- Helping students and parents understand assessment strategies and giving them meaningful feedback for improvement.

A self-reflection tool related to professional development, which new teachers are encouraged to use in conversation with their mentor. It contains a list of questions like:

- How can I use ongoing assessment strategies during a lesson to determine if students are learning what is being taught?
- In what ways do I give my students feedback for improvement? How do I provide class time for students to implement the suggestions for improvement? How can I monitor students' use of feedback? What type of feedback has proven most successful?

A list of "conversation starters" for principals to use when talking to new teachers about their classroom assessment practices, including:

- What kind of student assessment data are you using to plan instruction and select learning resources?
- What support do you need to analyse the student achievement data you gather?

Sources: Ontario Ministry of Education (2010[74]), *Compilation of Professional Development Core Content to Support the New Teacher Induction Program (NTIP): A Resource for Board NTIP Teams*, http://www.edu.gov.on.ca/eng/teacher/NTIPCore.pdf; Ontario Ministry of Education (2010[75]), *New Teacher Induction Program Induction Elements Manual*, http://www.edu.gov.on.ca/eng/teacher/pdfs/NTIP-English_Elements-september2010.pdf.

Table 3.2. Policy recommendations

Policy issues	Recommendations	Actions
3.1. Providing teachers with richer assessment resources that support competency acquisition	3.1.1. Help teachers to monitor learning in line with national standards	● Develop rubrics and exemplars to help teachers apply national learning standards in their classroom practice ● Develop diagnostic assessments to ensure that students are meeting national standards ● Introduce early grade assessments that are age appropriate and have a clearly defined formative function ● Provide additional resources to address the needs of students identified as being at risk of falling behind ● Support teachers to use the results from standardised assessments to monitor learning
	3.1.2. Provide teachers with tools to assess a wider range of competencies	● Develop nationally validated assessment instruments ● Provide guidance to support the development and implementation of classroom assessments ● Develop and fully implement the e-portfolio
	3.1.3. Redesign the *EBA* portal to provide a broader range of better-quality resources	● Ensure that the ministry leads the development of *EBA* ● Involve teachers in the redesign of *EBA* ● Identify resources to be developed as a priority
3.2. Using formative feedback and reporting to better support student learning	3.2.1. Support more formative feedback in the classroom	● Help teachers to learn about and practice different feedback techniques ● Provide school-level support for effective feedback ● Adapt teaching standards and regulations to ensure that formative assessment and feedback are central to teaching
	3.2.2. Use reporting to help parents and students better understand learning levels and next steps	● Report student performance against national learning standards ● Consider how to report the development of transversal competencies ● Incorporate qualitative feedback when reporting student performance ● Clearly communicate changes to students, parents and teachers
3.3. Reinforcing in-service training on assessment	3.3.1. Make training on classroom assessment a top professional development priority	● Require all teachers to undertake professional development on assessment ● Ensure that professional development reflects teachers' needs ● Connect professional development to teachers' classroom practices ● Make professional development more responsive to national priorities to reduce summative testing ● Develop facilitators' assessment expertise ● Make greater use of technology to expand professional development ● Proceed with plans to adopt standards for effective professional learning
	3.3.2. Develop school-based professional learning on assessment	● Provide leadership for school-level professional development activities on assessment ● Provide dedicated time for teachers to work together on assessment ● Develop school-based moderation practices
3.4. Improving teachers' initial preparation in classroom assessment	3.4.1. Ensure sufficient coverage of classroom assessment in initial teacher preparation	● Use new teacher competencies to inform the development of initial education programme content on assessment ● Implement the tertiary accreditation process and incorporate new teacher assessment competencies into the accreditation requirements ● Establish an advisory committee with representatives from the ministry and the Council of Higher Education to enhance the initial preparation of teachers
	3.4.2. Ensure that initial preparation in classroom assessment is practical and connected to the school curriculum	● Cover classroom assessment in initial teacher education coursework ● Cover classroom assessment in the practicum ● Model the assessment practices teachers will need to use in the classroom ● Build the classroom assessment capacity of initial teacher education providers ● Use the induction period to continue developing capacity for assessment

Notes

[1] The Student Learning Achievement Monitoring assessment was introduced under the Ministry of National Education's 2023 Education Vision. It is intended to provide schools with diagnostic information on students' strengths and weaknesses in Turkish, mathematics and science. As of mid-2019, some 300,000 students in grades 4, 7 and 10 have participated in the assessment. The Turkish Language Skills Study assesses the competencies of students in four areas: listening, reading, writing and speaking. It has so far been conducted in 15 provinces prior to the nationwide placement exams, providing students with feedback on their Turkish language proficiency and suggestions on areas where they need to improve. The Common Examinations initiative refers to newly introduced joint examinations conducted at the provincial level. The purpose is to provide large-scale, comparable data on student performance as well as information for students themselves to better understand their proficiency gaps. The Ministry of National Education expects that the results obtained from these initiatives will be examined at the school level and used to inform the design of weekend courses to help students address areas of weakness. These initiatives were introduced after the analysis for this review was completed and are therefore not addressed in this report.

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Chapter 4. Ensuring national examinations and assessments support learning

In Turkey, the national examinations at the end of lower and upper secondary provide an important selection function for a limited number of prestigious high school and bachelor's programmes. While the examinations fulfil this function transparently and provide results that are trusted nationally, their educational value could be enhanced. This chapter provides suggestions for incremental changes to the national examinations, so that after time they better encourage students to develop the deeper knowledge and skills upon which the national curriculum is based. It also provides suggestions for how the country's new national assessment, ABİDE, can be developed to best support improved learning outcomes and enhanced assessment literacy among teachers.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Introduction

Turkey's central examinations at the end of Grades 8 and 12 are designed to place students based on ability in different upper secondary and tertiary programmes and institutions. However, the different quality of learning options leads to a significant mismatch between the large number of students who want to attend the best high schools and bachelor's degree programmes and available places. The pressure on high school and tertiary places results in teachers and students devoting considerable time to preparing for the central examinations. Since the examinations are based primarily on multiple-choice items that assess knowledge recall in discrete domains, this results in a narrowing of student learning and less attention to the acquisition of more complex competencies. Developing students' ability to draw on their knowledge and skills across different subject areas to demonstrate competencies like effective communication, critical thinking and problem solving are central to Turkey's curriculum and the country's development as a modern knowledge economy.

In recent years, and most recently during the course of this review[1], Turkey has sought to reform its examinations to reduce some of their distorting consequences for teaching and learning. This chapter provides further recommendations for the design and questions used in the examinations so that selection into upper secondary and tertiary education is as objective and fair as possible in the current context. It also sets out options to better align examinations with national goals for universal completion of upper secondary, notably through the introduction of an examination that helps certify student learning at the end of compulsory education by including some externally examined components.

This chapter also provides recommendations on how Turkey might address the disparities between the demand and supply of quality upper secondary and tertiary pathways, which puts significant pressure on the education system. This would help to create a more inclusive education system that offers students a range of quality learning paths in the reflection of their interests and strengths, and national skills needs. It also looks at how Turkey can make better use of learning data to reduce inequities in school quality and give students a fairer chance – and more genuine choice – in accessing different pathways. Here, an important measure will be fully developing and implementing the national assessment, ABİDE to provide reliable information on learning at the system, school and student level to support more equal standards. New initiatives launched in association with Turkey's new education vision for 2023 – namely, the Student Learning Achievement Monitoring assessment, the Turkish Language Skills Study and the Common Examinations project[2] – also hold promise in this regard.

Context and main features of examinations and national assessment

Responsibilities for examinations and assessment

Two organisations are responsible for central examinations and assessments: the General Directorate of Measurement, Evaluation and Examination Services in the Ministry of National Education (MoNE); and the Measurement, Selection and Placement Centre (ÖSYM), a body outside MoNE (see Figure 1.1, Chapter 1).

The General Directorate of Measurement, Evaluation and Examination Services is supporting national assessment capacity

In 2014, the Directorate of Measurement, Evaluation and Examination Services became a separate General Directorate in the ministry, having previously been a unit within a wider directorate. With this structural change, the directorate has taken on a greater role in the analysis and use of assessment data across the education system in Turkey. The directorate continues to be responsible for central examinations, notably at the end of Grade 8. It now also undertakes projects to develop assessment capacity and instruments. This has included developing: a National Assessment of Student Learning – *Akademik Becerilerin İzlenmesi ve Değerlendirilmesi* (*ABİDE*); a project to enhance teachers' capacity for classroom assessment; and the establishment and co-ordination of pilot assessment centres in all provincial directorates to help improve provincial directorates' and schools' assessment capacity. The directorate has also recently introduced Student Learning Achievement Monitoring assessments, and conducts other examinations for selection and promotion for some public professions and private bodies.

The central examination at the end of compulsory education is the responsibility of the ÖSYM, which is separate from the ministry

The ÖSYM is responsible for designing, administering and overseeing the marking of the university placement examination in Grade 12 and placing students in tertiary programmes. The Placement Centre is separate from the ministry but reports to the Minister of National Education. The centre is also responsible for the automated university placement system that uses student scores from the university placement examination to allocate students to tertiary education institutions and programmes. Previous OECD analysis highlighted that the location of responsibility for the university placement examination in a body that is largely independent of the ministry (OECD, 2007[1]). Many steps are taken to ensure alignment between the school curriculum and the examination at the end of upper secondary, including protocols signed between the Placement Centre and the ministry, and clear examination specifications based on the curriculum. However, the separation of the institution that is responsible for the examination from the ministry can create a risk of misalignment. The location of responsibility for the university placement examination outside the ministry is all the more notable as this is currently the only national standardised examination at the end of secondary education. There is no examination in Turkey to certify learning on completion of compulsory schooling, such as exists in most other OECD countries.

National examinations

There have been multiple reforms to the examination at the end of Grade 8 for high school placement

Turkey has historically had some form of examination at the end of Grade 8 to determine student placement into the country's different types of high school. In recent decades, the country has implemented reforms to the examination and the placement system for high schools motivated by a desire to create a fair and transparent system for student selection, while also helping to reduce disparities in performance and quality across school types.

Prior to 2008, a centralised examination at the end of Grade 8 was used for high school placement. This was later changed to students taking centralised examinations at the ends of the Grades 6, 7 and 8. However, this led to constant pressure on students throughout

lower secondary and with the system of a single centralised examination at the end of Grade 8 returned. In 2013, a new student placement system, *Temel Öğretimden Ortaöğretime Geçiş Sistemi* – Transition from Elementary Schools to Secondary Schools Exam (TEOG), was introduced and was still in place at the time of the OECD review team's mission to Turkey in May 2017. Under the TEOG, a single, aggregate score was calculated for each student based on two centralised examinations in Grade 8 set by the General Directorate of Measurement, Evaluation and Examination Services (MEES) and their marks from classroom assessments. The score was used to place students by automatically matching them to high school places based on their TEOG score and preferences (see Table 4.1). The system was perceived to be fair and transparent, with public confidence in its integrity.

Table 4.1. Recent changes to the Grade 8 examination

	TEOG, 2013-17	New examination for selective high schools, 2018
When	Two exam sessions: 1st semester (November) and 2nd semester (April).	One exam session at the end of the school year (June).
Purpose	Determine placement in all high schools.	Determine placement in minority of the most prestigious high schools and programmes.
Eligibility	Compulsory for all Grade 8 students.	Optional for all Grade 8 students.
Components	Two centralised examinations (70% of final mark). Classroom assessment marks from Grades 6, 7 and 8 (30% of final mark).	One centralised examination across two sessions.
Content assessed	National curriculum.	National curriculum.
Subjects covered	Examinations: Turkish, mathematics, sciences, culture of religion and knowledge of ethics, history of Turkish Republic, and a foreign language. Subjects are weighted to reflect their relative weight in the timetable. Classroom assessments: all subjects.	One "verbal" examination: Turkish, culture of religion and knowledge of ethics, history of Turkish Republic, and a foreign language. One 'numeric' examination: mathematics and science. Turkish, mathematics and sciences carry a weighted coefficient of 4; history of the Turkish Republic, religion and ethics and a foreign language carry a coefficient of 1.
Format	Examinations: 20 multiple-choice items (4 options, 1 correct answer) in 40 minutes. Classroom assessments: determined by teacher within scope of national regulations.	Two booklets with multiple choice questions. Verbal examination: 50 questions in 75 minutes. Numeric examination: 40 questions in 60 minutes.
Item development	Teachers engaged in short-term contracts.	Teachers engaged in short-term contracts.
Marking	Students record their answers on an answer sheet that is scanned and processed using optical mark reading software. Incorrect and missing responses are scored as zero i.e. there is no penalty for guessing.	Students record their answers on an answer sheet that is scanned and processed using optical mark reading software. It has not yet been decided whether there will be a penalty for guessing.
Grading	Examination: a student's scores across 2 centralised examinations are used to calculate an average mark out of 700. Classroom assessment: students score a maximum of 100 marks for each grade, based on their average from all subjects. An average mark out of 100 is calculated on the basis of their score from Grades 6, 7 and 8. Final TEOG score: a student's marks from the examinations and classroom assessments are used to calculate an aggregate mark with a maximum of 500. There is no minimum mark required to "pass".	A student's raw score is converted to a standard score for placements. There is no minimum mark required to "pass".

However, the TEOG also had a series of negative consequences for teaching, learning and equity. It created significant competition for school places, with students and teachers devoting a great deal of time to examination preparation, rather than the development of the broader competencies emphasised in the curriculum. It also reinforced disparities in educational access, with a disproportionate share of students from higher socio-economic groups attending the most selective schools. For the few students who did not achieve a high enough mark in the TEOG, it also meant that they were unable to gain a high school place and had to continue their compulsory education through distance learning in an open high school. These consequences informed the decision to end the TEOG in 2017.

Since September 2018, the vast majority of Turkish students starting high school have been placed in a school within their local area

Under the new placement system, Grade 8 students select 5 schools in their local area that they wish to attend. A centralised and automated placement system operated by the General Directorate of Measurement, Evaluation and Examination Services place students according to their preferences and geographic proximity. Given many students want to attend the "best" schools, i.e. those with previously high TEOG entrance scores, it is likely that there will not be enough places in a student's preferred schools. In this case, the directorate applies oversubscription criteria to determine a student's placement. Factors likely to be included in the criteria are: school proximity; having sisters or brothers at the same school or having already attended the school; previous academic success of student; attendance; and date of birth (with priority given to younger students).

A minority of school places are determined by a centralised examination

As of September 2018, student placement in the most prestigious schools and programmes (approximately 10% of all high school places) is determined by student performance on a centralised examination set by the General Directorate of Measurement, Evaluation and Examinations. The selective school places is more or less equally distributed across the country and chosen by the provincial education directorates according to criteria set by the ministry. The places include schools or programmes in high demand, where students had to achieve high TEOG scores to gain entry in the past. They also include a range of different schools and programmes, including some competitive vocational and technical programmes like computing and mechanics. The entrance examination is similar to the previous TEOG examination in terms of design and assess similar content (see Table 4.1). Sample questions suggested that it also includes more questions set in real-world contexts designed to assess higher-order skills.

The examination at the end of Grade 12 serves as the gatekeeper for tertiary education institutions and programmes

Grade 12 students, as well as those who have previously completed compulsory education, are eligible to take the university placement examination. This examination was also reformed during the course of this review[3], although there is significant continuity with the previous system (see Table 4.2). In its previous and new forms, the examination has two stages. The first stage examination (*Yükseköğretime Geçiş Sınavı*, YGS) is now replaced with the Basic Proficiency Test (*Temel Yeterlilik Testi*, TYT). It comprises four multiple-choice tests in Turkish, mathematics, social sciences and science that students take in one sitting at the end of the school year. Students must meet a minimum score of 150 to be

placed on a short course tertiary programme and 180 to be placed on a four-year bachelor's programme.

Table 4.2. Changes to the Grade 12 examinations

	Student Selection and Placement System (ÖSYS), 2017	Higher Education Institutions Examination, 2018
When	1st stage YGS in spring semester. 2nd stage LYS in June (end of school year).	1st stage TYT and 2nd stage AYT taken over 1 weekend in June (end of school year).
Purpose	1st stage: determines student eligibility for tertiary programmes. Students must meet minimum threshold to progress to 2nd stage. 2nd stage: determines placement on bachelor's programme and institution. Students who wish to study a bachelor's programme with a foreign language component are also required to take the foreign language test.	Remains the same.
Eligibility	Optional for students completing compulsory education. No limits on repetition.	Remains the same.
Components	Two centralised examinations taken separately. Classroom assessment marks from Grades 9 to 12.	Remains the same.
Content assessed	1st stage: national curriculum in Grades 9 and 10. 2nd stage: full high school curriculum.	Remains the same.
Subjects covered	1st stage (YGS): Turkish (40 questions), basic mathematics (40 questions), science (40 questions) and social sciences and liberal arts (40 questions). 2nd stage (LYS): 5 tests in key subject areas corresponding to various academic profiles - Turkish language and literature; mathematics; sciences; social sciences; foreign languages Students choose which tests to take, depending on the bachelor's programme they wish to study. Foreign language test.	1st stage (TYT): Turkish (40 questions); basic mathematics (40 questions); sciences (20 questions); social sciences and liberal arts (20 questions). 2nd stage (AYT): 4 tests in key subject areas corresponding to various academic profiles - Turkish language and literature and social sciences (40 questions); mathematics (40 questions); social sciences (40 questions) and science (40 questions). Students take 2, 3 or 4 tests depending on the score type they wish to calculate and the tertiary education programme they wish to study. Foreign language test.
Format	Predominantly multiple-choice (5 options, 1 correct answer). YGS: 160 items to be answered in 160 minutes. LYS: Mathematics (80 items in 135 minutes). Sciences (90 questions in 135 minutes). Literature and geography (80 questions in 135 minutes). Social sciences (90 questions in 135 minutes). Foreign language test (80 questions in 120 minutes). In recent years, the LYS included a small number of short, constructed response items.	All multiple choice questions. TYT: 120 items to be answered in 135 minutes. AYT: 160 items to be answered in 180 minutes. Foreign language test: 80 items to be answered in 120 minutes.
Marking	Automatic marking through the optical mark reading (OMR) technologies. One-fourth of the number of incorrect answers are subtracted from the number of correct answers to find the raw score achieved by a candidate in a test.	Remains the same.
Grading	1st stage – students score a maximum of 500 marks. A minimum of 180 is required to be eligible for the 2nd stage and a minimum of 150 is required to be placed on a short course tertiary programme. 2nd stage – a student's university placement score is calculated based on their average of the YGS (40%) and LYS and foreign language examinations (60%), and their classroom assessments mark. To calculate the classroom assessment grade, the student's average mark from Grades 9 to 12 is calculated as a maximum out of 100 and multiplied by the coefficient 0.12. Different weights are applied to the LYS scores depending on the bachelor's degree being applied for.	Remains the same.

The second stage examination, the Field Qualification Tests (*Alan Yeterlilik Testleri*, AYT, previously the LYS) also takes place at the end of the year. Students can choose to take up to four tests in the subjects relevant to the fields of study they wish to pursue in university. The tests now comprise only multiple-choice questions though, in the LYS of 2017, a small number of short, constructed response items had been included. A student's results from the first stage, TYT (40%), and the second stage, AYT (60%), are combined with their grade point average (the average value of a student's final grades) from Grades 9 to 12 to calculate a final placement score, with the marks from classroom assessments contributing a minimum of 30 marks and a maximum of 60 points overall. After students have received their results, they indicate their preferences for up to 24 programmes and institutions via a centralised system which automatically assigns applicants to bachelor's programmes based on: the applicant's preferences; the applicant's placement score; and the number of places available on each programme of study.

The 2018 examination reforms aimed to reduce pressure on students

The decision to organise the examination in 2018 over a single weekend aimed to reduce pressure and disruption for students. The university placement examinations previously took place over five days. The overall number of questions in both stages was slightly less than in previous years, providing students with more time than before to answer questions.

According to the ÖSYM, a key change following the 2018 examination reform was that the first stage examination, the TYT, would focus on assessing basic skills and students' ability to use and apply knowledge in different contexts. Sample questions shared by the centre with the public suggest that some questions, especially in the mathematics tests did assess more basic skills in some real-world settings (in contrast to the very difficult, more abstract mathematics assessed in the previous YGS tests). However, overall the samples from 2018 suggest that there remained significant continuity with the previous items and the skills that are assessed. The OECD review team was informed that a new approach to item development has subsequently been introduced to improve the quality of items from the perspective of situating tasks in authentic contexts and assessing higher-order thinking skills. While the changes sound highly promising, the review team was not in a position to analyse the new item types.

Competition for a place on a bachelor's programme is intense

The university placement system is based on criteria that are objective, efficient and, of paramount importance, transparent. However, it is also a very competitive process. While over 2 million students on average take the university placement examination each year, in 2017 there were places for less than a quarter of candidates in bachelor's programmes (MoNE, 2014[2]). This leaves the remaining students attending open education, distance learning undergraduate courses, or the short cycle courses that account for around half of all tertiary enrolments in Turkey. The latter are generally provided by vocational and technical tertiary institutions which are perceived to be of poor quality and carry a lower status than bachelor's programmes (World Bank, 2007[3]). Students in short cycle programmes are also more likely to drop out, with a third dropping out before completion, in contrast to just 6% of bachelor's degree students (OECD, 2016[4]).

The competition for tertiary places means that students, parents and teachers devote significant time and energy to examination preparation. In 2015, 15-year-olds in Turkey spent more time in after-school study than their peers in any other OECD country (OECD, 2016[5]). It was also reported to the OECD review team that some students in the final years

of upper secondary choose to leave their regular high school to attend the distance learning courses provided by open high schools with a flexible schedule so that they can focus more on examination preparation. The desire to obtain a high score in the university placement examination also means that more than half of the examination's candidates each year are repeaters, who are retaking the examination in the hope of being able to enrol in a more prestigious tertiary education course or institution.

Open examinations are available for those who have followed alternative educational routes

"Open examinations" are available for students in open lower secondary schools and open high schools, as well as students who have followed alternative educational routes, such as those who had previously dropped out of school or studied overseas. Students in open schools are required to pass these examinations to continue their education in the open system. However, to re-enter formal secondary education, students must be below the upper age limit of 18 years and need to apply to the local provincial education directorate for permission. To enter formal tertiary education, students must complete the standard university entrance examinations.

Assessments

A new national assessment, ABİDE, has the potential to fill an important gap in reliable data on learning outcomes

In 2016, the Directorate of Measurement, Evaluation and Examinations developed and administered a new national assessment – *Akademik Becerilerin İzlenmesi ve Değerlendirilmesi* - National Assessment of Student Learning (ABİDE) – applied to a sample of Grade 4 and 8 students to provide nationally representative results. The directorate administered the sample assessment to Grade 4 students in April 2018. Up until 2013, Turkey had conducted sample national assessments in Grades 4, 5, 6, 7, 8 and 11, called Situation Assessment Studies, to monitor achievement and collect some background information such as students' socio-economic status. The assessments enabled the ministry to compare performance across regions and different types of schools; however, it was discontinued and for the past five years Turkey has not reported any standardised data on student learning in basic education (OECD, 2007[1]; OECD, 2013[6]).

ABİDE aims to fill this gap by providing reliable and comparative data to measure learning outcomes against the national curriculum. The 2016 pilot assessed students in Turkish, mathematics, sciences and social sciences. It also included questionnaires for students, teachers and school leaders to gather information on background factors that may be influencing learning outcomes. Although it had not yet done so at the time of the OECD review visit, the directorate has also published a national report on the results from the Grade 8 pilot. The directorate is also using ABİDE to trial a broader range of questions than those that are typically used in Turkey's high-stake central examinations. For example, the 2016 pilot included some open-ended, constructed response items, with the intention of considering the use of similar types of questions in the TEOG examination.

The OECD was informed of three more recent assessment initiatives intended to provide more reliable information on student progress nationwide, as well as to enhance the diagnostic information available to teachers and schools at the classroom level. These are the Student Learning Achievement Monitoring assessment, the Turkish Language Skills Study and the Common Examinations[2] initiatives. While the intent of these initiatives

appears very positive, they were introduced after the analysis for this review was completed and are therefore not addressed in this report.

Regular participation in international student assessments provides periodic information on student performance against international benchmarks

Turkey participates in two international student assessments – the OECD Programme for International Student Assessment (PISA) since 2003, and the International Association for the Evaluation of Educational Achievement (IEA) Trends in International Mathematics and Science Study (TIMSS). PISA assesses 15-year-olds' science, reading and mathematical literacy and is conducted every 3 years, while TIMSS assesses students in Grades 4 and 8 in mathematics and science every 4 years. Turkey has participated in the Grade 8 assessment since 1999, and the Grade 4 assessment since 2011.

Both PISA and TIMSS assess students against international frameworks of the knowledge and skills that are important for full participation in modern economies. For PISA, this includes knowledge and competencies such as the ability to apply knowledge and skills and to analyse, reason and communicate effectively to solve problems. Alongside the student assessments, both PISA and TIMSS collect information on the background factors that may influence student learning. This includes questionnaires for students to collect information on their motivation and perceptions of school, and school principals on the school learning environment. PISA also includes questionnaires to parents, and teachers participate in TIMSS by sharing information on their education, professional development and experience in teaching.

Other types of diplomas and certification

Turkish students completing compulsory education receive a diploma

Upon completing compulsory education, students may be awarded a High School Diploma or a Vocational and Technical High School Diploma depending on the type of high school they have attended. High school diplomas are aligned with Level 4 on Turkey's National Qualifications Framework that was published in 2015 and is benchmarked against the European Qualifications Framework (MYK, 2013[7]). The diploma, with an accompanying transcript, records students' results in school-based assessments and includes a summative "diploma score", with marks of 50 or over corresponding to a "pass". Since the diploma is entirely based on results from classroom assessments, there is no standardised component to ensure that all students have reached the same minimum standards or to provide reliable information. In some specialist areas such as computing, students in vocational and technical high schools can also apply to the Vocational Qualifications Authority to take an additional examination that leads to the awarding of a Vocational Qualification Certificate. Vocational Qualification Certificates are provided at different levels aligned with Turkey's National Qualifications Framework (MYK, 2013[7]).

Policy issues

In the aftermath of the decision to end the TEOG examination, Turkey's most urgent priority is to develop a high school placement system that can cope with the likely acute oversubscription in some schools, in a way that is efficient, transparent and objective. Over time, providing more information to guide student choice and improving flexibility between pathways will help to ensure a better match between demand and supply for high school places. At the end of compulsory education, the first priority should be to introduce

an examination to help certify learning and achievement and the second, to ensure that the examination for tertiary selection discriminates more effectively based on the competencies and higher-order skills that are important at this level. Finally, it is critical that Turkey addresses a major gap in national data on learning outcomes, by fully implementing its pilot national assessment, ABİDE. Providing adequate time for implementation and development of these all changes will be essential for their success.

Policy issue 4.1. Enhancing the school placement and selection process at the end of Grade 8

Reform of the examination and student placement system at the end of Grade 8 is closely related to the current high school offer in Turkey and the challenge the country is facing in managing the transition from an elite to a universal system of upper secondary education. Turkey has an established body of prestigious high schools – the science high schools and previously the Anatolian high schools – where entry is determined by examination results. The outcomes of students from these high schools are significantly better than those of students at other general, and vocational and technical high schools. In 2016, 54% of graduates from science high schools went on to study for a bachelor's degree, compared with 23% of graduates from general high schools and just 8% of those from vocational and technical high schools (MoNE, 2016[8]). Students in the science and Anatolian high schools have also tended to benefit from more learning time devoted to core subjects like science and mathematics, as well as the most qualified teachers (Clark, 2014[9]). The wide variations in student learning experience and outcomes across the different types of high schools mean that placement at the end of Grade 8 carries very high stakes, putting considerable pressure on students and families to gain access to the best schools and fuelling a large system of private tutoring.

Over the past 15 years, Turkey has implemented a series of reforms to address these pressures and the inequities they create. In 2010, Turkey began converting all high schools into Anatolian high schools and introduced a common curriculum in Grades 9 and 10 in an attempt to reduce differences in school quality. Turkey's Tenth Development Plan proposes to reduce still further the variety of high school types and facilitate student mobility across programmes. Other policies to support greater equity have included the prohibition of private tutoring and requiring all students to attend their local primary and lower secondary school.

These reforms have been complemented by successive changes to the placement mechanism at the end of Grade 8. The TEOG system that was introduced in 2013 aimed to create a fair, transparent and objective system by requiring all students to take the same central examination for high school entry. However, by making entry to all high schools dependent on examination results, the TEOG also exerted a powerful backwash effect on education, putting pressure on young learners and resulting in many schools, parents and students focusing on examination preparation. For these reasons in 2018, the TEOG was replaced with a new system of high school placement, where most students transition to high schools in their local area, based on proximity and their programme preferences.

In several respects, this most recent change to the high school placement system brings Turkey closer towards the practice in other OECD countries. Most OECD countries that offer different upper secondary programmes avoid relying heavily on the results of national examinations to determine student pathways. Instead, these countries use a range of both national and classroom assessment information, alongside other elements, to inform decisions that are largely taken at school level (see Box 4.1). However, while the intention

of the current reform is positive, there are likely to be many challenges in the first years of implementation, not least oversubscription at the schools perceived to be the best. It will be essential that Turkey develops a transparent system to manage oversubscriptions, otherwise, student and parent opposition will make the new placement system vulnerable to reactive policy changes. This review provides suggestions of how this might be done, recognising that the effectiveness of any planned improvements to the examination system will be highly dependent on the success of longer-term policies to create more equal standards of quality across Turkey's high schools.

Box 4.1. Student placement in different secondary programmes in OECD countries

Thirty-two OECD countries place students in different programmes during lower or upper secondary education. On average across OECD countries, three different programmes are available to secondary students broadly corresponding to academic, vocational and technical programmes. However, there is wide variation across countries, from 7 programmes in the Netherlands to just 2 in Greece. Placement most frequently takes place at age 16 but occurs much earlier in a few countries, such as Austria and Germany, where students are placed in different pathways at age 10.

To determine student placements, most OECD countries complement results from central or national examinations with information from classroom-based assessments, and student and parent choice. To ensure that a range of evidence about student performance is combined with their interests and preferences to help identify the programmes best suited to the individual student, a number of countries use individual student plans or class/teacher councils.

Individual student plans

A number of OECD countries use individual student plans to collect evidence of student learning across a range of competencies. The plans are used as the basis for a discussion between parents, students and teachers about future educational pathways that will be best suited to the needs of a student. In **Sweden**, **Individual Development Plans** record students' development in relation to their learning and personal goals, and identify the next steps that will help students to reach their goals. Teachers discuss the plans with students and their parents.

Teacher and class councils

Councils take into account a range of evidence about a student's academic performance and interests to discuss which pathway will best meet the strengths and needs of an individual student. In **France, class councils (*conseil de classe*)** evaluate each student's performance throughout the year. Each grade has a council that includes the school principal, teaching staff, two parents, two students and a guidance counsellor. The class council meets at least three times a year. It reviews each student's academic performance and takes into account his or her interests and medical and social well-being in order to advise the student on pathways. Students can appeal against decisions made by the class council if they wish.

Sources: Ministry of Education and Research (2010[10]), *Country Background Report for Sweden*, https://www.oecd.org/sweden/45957739.pdf; OECD (2016[5]), *PISA 2015 Results (Volume II), Policies and Practices for Successful Schools*, http://dx.doi.org/10.1787/9789264267510-en; Ministère de l'Éducation Nationale (2018[11]), *Les Niveaux et les Etablissements d'Enseignement [Levels and Educational Institutions]*, http://www.education.gouv.fr/pid24/les-niveaux-et-les-etablissements-d-enseignement.html; Euridyce (2018[12]), *The Information Database on Education Systems in Europe*, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Countries (accessed 10 January 2018).

Recommendation 4.1.1. Consider the system for high school placement to manage demand

Following the 2018 reform, the likely mismatch between supply and demand for certain schools makes it critical that the criteria used to place students when their preferences are oversubscribed are transparent. The pressure will be particularly acute in the first few years after the adoption of the new system since the TEOG has shaped students' and parents' perceptions of school quality. Few students will actively choose to attend a school that had low average TEOG entrance scores in the past or a reputation for low transition rates to bachelor's programmes.

Ensure that students and parents understand how the new placement system will operate

Under the new system, most Turkish students will be placed in one of their preferred high schools based on the area of residence. To ensure that this new system is transparent, Turkey will need to ensure that the criteria for high school placements are made publicly available well before students and parents are required to formally indicate their high school preferences. The ministry should also encourage lower secondary schools to organise information evenings for Grade 8 students and their parents to ensure that they have a clear understanding of how the placement system will operate.

Basing the new placement system on the area of residence is objective and is the factor most frequently considered systematically for admission to the schools that 15-year-olds attend across OECD countries (OECD, 2016[5]). However, in Turkey as in many other countries, not all schools are equal. Some students may be trapped in areas where schools are low quality, encouraging families to move to areas where schools are perceived to be good (UCL Institute of Education, 2015[13]). Turkey has introduced measures to try to reduce this practice, for example, by taking into account the number of semesters that a student has been attending their lower secondary school. However, the impact of such policies will remain limited in the absence of deliberate efforts to improve schools in disadvantaged communities and reduce the country's very large geographic disparities.

Develop transparent criteria for oversubscribed schools

A particular challenge for Turkey will be determining places when schools are oversubscribed. The ministry is considering applying transparent and objective criteria like having siblings currently attending the school or in the past, students' current rate of attendance and their date of birth. Turkey also plans to use subjective criteria like students' marks from classroom assessments. This will provide information to match students to pathways where they are more likely to do well based on their strengths and abilities. In many other OECD countries, a student's classroom performance also informs their upper secondary pathways (see Box 4.1).

However, there is a risk that the classroom marks effectively become another means to rank students, similar to the previous TEOG system. There are also challenges to using classroom assessment results accurately and reliably in Turkey. Teachers report that they find it difficult to assess accurately students' levels of learning (Kan, 2017[14]). There are also few moderation practices like teachers coming together within and across schools to ensure that student work is assessed to a common standard. Perceived differences in school quality, limited opportunities for students to move across pathways and the relatively early

age of selection also mean that high school placement carries very high stakes, which risks that teachers will be vulnerable to pressure to inflate student marks.

Aware of these challenges, the ministry is considering reporting students' classroom marks as broad categories for the purposes of high school placement (e.g. A, B, C, etc.), rather than the mark out of 100 points that school report cards use. This approach aims to avoid excessive competition focused on small differences in student marks and to create more heterogeneous school intakes. However, since there will still be challenges associated with the reliability and accuracy of classroom assessment marks, the oversubscription criteria should ensure that students' classroom marks are balanced by the more objective and transparent factors like distance, having a sibling in a school and age. Another option to encourage objectivity and transparency would be to apply a lottery within the categories of academic performance to determine the students within each category who gain a place in oversubscribed schools. In the medium to long term, measures to improve teachers' assessment skills (see Chapters 2 and 3) and stronger school-level moderation practices should help to make marks based on classroom assessment more reliable.

Recommendation 4.1.2. Provide more information to guide student choice, while improving flexibility between pathways

Developing a placement system that is both transparent and fair will mean providing more and better-quality information to students and their parents about the pathways that are likely to match their interests and abilities. It will also mean reducing the stakes associated with placements by creating more flexibility across pathways.

Develop resources, like the new e-portfolios and career guidance, to inform students' high school preferences

Under the new placement system, student choice will be a more influential factor that in the past so students will need more support to choose high school programmes that reflect their interests, abilities and future career opportunities. This is especially important for informing student demand for vocational and technical high schools so that these are seen as a pathway to develop valued competencies rather than a second-choice option for those who do less well in academic tests. There are several measures that Turkey might consider to help students make more informed decisions on their high school choice:

- **Develop the e-portfolio.** The pilot e-portfolio can be developed to document evidence of learning in different areas of knowledge and skills to inform students' high school preferences. Using evidence of learning in this way encourages students to think about what their interests and strengths are, and how different high school programmes and ultimately tertiary and career options can best match these. Teachers will need training and guidance on the types of evidence that can be used to document different skills, knowledge and competencies (see Chapter 3).
- **Provide more support to schools on how to discuss options with students and parents**. If Turkey is to move towards a more demand-driven system of school selection, guidance services in lower secondary schools will need to be significantly enhanced. Guidance counsellors will need to receive more, high-quality training and be able to access reliable information about the types of careers associated with different programme options, in particular for vocational and technical pathways. The overall numbers may also need to be expanded since there is currently just one counsellor per high school in general.

While building a cadre of guidance counsellors will take time, there are other measures that could be introduced relatively easily to help students understand better the options available. Schools can be encouraged to organise visits to and/or from different high schools in the catchment area. Some countries introduce careers guidance as a subject in the curriculum in middle school, which is something Turkey might consider. Norway, for example, makes *Selection for Education* a mandatory subject throughout lower secondary education. It provides information about the programmes available, the main differences and the career possibilities for each. Another course, *Working-Life Skills*, gives students an introduction to real-work situations as a means to help inform decisions on vocational education programmes (OECD, 2011[15]).

- **Provide information on a wider range of high school outcomes**. Effective guidance will require more information than is currently available on the outcomes of different high school programmes, beyond success in the tertiary placement examination. National labour market information systems can be helpful to signal the value of different programmes, as can information about the kinds of competencies that employers look for in new recruits (OECD, 2010[16]). However, local information and experiences – the testimonies of successful graduates from vocational and technical education and local employers, for example, and direct access to workplace experiences – are also important to steer choices.

Create greater flexibility across upper secondary programmes

Some flexibility for students across upper secondary programmes is important to reduce the stakes of initial selection and to ensure that students do not remain in a programme that does not reflect their interests or ability. In Turkey, all schools follow a common curriculum in Grades 9 and 10, in theory providing students with the possibility to change tracks up until the end of Grade 10. However, in practice under TEOG, it was rare for a student in a vocational or technical programme to move to a general programme. A student wanting to move school or programme in Grades 9 or 10 was still required to meet the initial threshold set by a school's average TEOG entrance score. There was no possibility to take into account a student's performance after the TEOG score was calculated, such as their performance in Grades 9 or 10, their motivation or interests. This risks that students who develop slightly later are confined to a programme that limits their future options and does not reflect their potential achievement. Most other OECD countries begin selection later than age 13 as in Turkey, most frequently at age 16, and provide greater opportunities to move between tracks. In the Netherlands for example, students who study in a combined general/vocational lower secondary track can later transfer to a general upper secondary track if they meet admission requirements such as minimum grades that are set by upper general secondary schools (Akkerman et al., 2011[17]).

In Turkey, high schools might be given greater discretion and encouragement to accept students from different programmes up until the end of Grade 10, where spaces are available. The greatest demand for transfer is likely to be from vocational and technical high schools into general schools. Transparent, national guidance will be needed to help schools decide among applicants. Criteria might reference explicitly both a student's performance in Grades 9 and 10 as measured by classroom assessment, as well as evidence of motivation for the programme that the student would like to study, through for example extra-curriculum activities or assignments documented in their e-portfolio. While there is likely to be less demand for transfer into vocational and technical schools, measures might

be taken to make students more aware of this option, such as through timetabled discussions of learning and career opportunities and opportunities for work experience.

Structural changes to upper secondary schooling to create greater flexibility across pathways might also be considered. The ministry is already considering providing provincial education directorates with some autonomy to adapt school structures to local demand, such as being able to increase school capacity or change high school types. In the medium to longer term, Turkey might also consider:

- **Providing provincial education directorates with the option to create more comprehensive high schools.** Some provinces in Turkey in rural or sparsely populated areas already have Multi-Program Anatolian High Schools that offer both vocational and general programmes within the same school. This reduces rigidity between tracks as it is easier for students to move across programmes and supports equity by bringing together students from a diverse range of backgrounds.
- **Delaying the age of selection by one or two years**. In the future, Turkey might consider delaying selection until the end of Grades 9 or 10. At the end of lower secondary, students would continue onto their local high school with selection taking place one or two years later. In 1999, Poland implemented a similar reform that increased the age of student selection from 14 to 15 years, with a significant positive impact on the learning outcomes of those students who had previously been placed in vocational options at 14 years (see Box 4.2).

Any change to the structure of schooling in Turkey would need to be carefully planned and gradually implemented. When Finland extended its comprehensive system until 16, it was implemented over a period of 5 years from 1972 to 1977 in selected regions, beginning with the less populated areas. Similarly, when Sweden extended comprehensive education until age 16, this was implemented gradually beginning with a few municipalities (OECD, 2012[18]).

Box 4.2. Poland's reforms for a comprehensive lower secondary gymnasium

In 1999, Poland implemented reforms to provide equal educational opportunities for all students and improve education quality. The reforms created a new comprehensive school – the new lower secondary gymnasium – and a new education system structure of six years at primary school and three years at the new lower secondary gymnasium. This replaced the previous system where students had remained in primary school for eight years and were then tracked into different pathways based on their performance in the placement exams. The top 20% went into a general secondary lyceum that prepared them for entry into university. The bottom half went to vocational schools and the remaining students attended two-year technical secondary schools. Under the new system, all students follow the same common curriculum until the age of 15, extending comprehensive education by one year.

The structural reform was accompanied by a new core curriculum for the lower secondary gymnasium. Curriculum development was also decentralised to the local level to engage schools and teachers, and central examinations were used to monitor results.

Studies suggest that the reform helped to reduce performance differences between schools and improved the performance of the lowest-achieving students. In PISA 2000, 21% of students in Poland only reached the lowest of PISA's competency levels, Level 1. Students in vocational schools performed significantly below those in general secondary school, with nearly 70% of vocational students performing at the lowest literacy level. By 2003, Poland's average student performance had improved and the fall in performance difference between schools was the greatest among all OECD countries. The trend continued in PISA 2006 where there was a 115-point improvement among those students who would previously have attended vocational schools but now received an additional year of general education in the new comprehensive lower secondary gymnasium.

Sources: OECD (2011[19]), *Lessons from PISA for the United States*, http://dx.doi.org/10.1787/9789264096660-en; OECD (2012[18]), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, http://dx.doi.org/10.1787/9789264130852-en.

Recommendation 4.1.3. Reduce any negative distortions created by the high school entrance examination

Retaining the competitive entrance examination for a minority of high schools will reinforce national perceptions of these schools' prestige and sustain the inequities that result from competitive selection. However, societal and parental pressures make it very difficult for Turkey not to keep a minority of elite, academically selective schools.

Following the 2018 reform, approximately 10% of high school places will be determined by student performance on the new centralised entrance examination. While this accounts for a small minority of overall high school places, the ministry predicts that in the examination's first years the vast majority of students, 1 million (out of a cohort of 1.2 million), will take it. In the future, as it becomes clear that only a minority of candidates are successful, the ministry expects that the number of candidates will fall. Other recommendations in this report should also, over time, help to reduce such extreme pressure. However, with such a high number of students taking the examination, at least in the short term, it is likely to exert significant influence on the education system, with students and parents devoting considerable time and resources to examination preparation. This makes it important that Turkey consider measures to mitigate negative impacts on equity and teaching and learning.

Consider measures to ensure that students from disadvantaged backgrounds have a fair chance of accessing selective schools

Turkey has put in place some measures to enhance access to selective high schools. The schools will be more or less equally distributed across the country. There will also be some diversity in the types of schools, which will include some high-demand vocational and technical programmes. However, these measures are unlikely to change the current situation where Turkey's most prestigious high schools attract a disproportionate share of students from the most advantaged socio-economic backgrounds. Internationally, other academically selective public schools also enrol a disproportionally greater share of students from higher socio-economic backgrounds than the local population. Some of these systems have introduced measures aimed at reducing disparities in access, which Turkey might draw upon. One option would be to group students according to socio-economic group (or an appropriate proxy) and offer places to those students who achieve the highest

marks in the entrance examination within each socio-economic group. Chicago's selective schools operate a similar system as do some schools in England (see Box 4.3).

Box 4.3. Efforts to mitigate the negative impacts for equity of selective public schools in England (United Kingdom) and the United States

In some states or local authorities in Australia, England (United Kingdom) and the United States, some secondary schools use performance in a competitive entrance examination, among other factors, to determine entry. Where these schools exist, there is frequently high demand for places. They also have a negative impact on equity – with most selective schools having a disproportionate share of students from advantaged socio-economic backgrounds. In New South Wales, Australia, for example, over 70% of students in Sydney's top 10 performing selective schools come from families in the top quarter of socio-economic groups (Ho, 2017[20]). Evidence from England finds that even when comparing students of similar ability, according to national assessment results, students from lower socio-economic groups are less likely to attend selective schools (UCL Institute of Education, 2015[13]).

Some of these selective schools have put in place measures to try to partially mitigate the negative impact of selection on equity:

- Chicago, United States: In Chicago, 11 "selective enrolment high schools" offer accelerated programmes for able students. Admission is based on student preferences and their score, which is calculated using their performance in the selective entrance exam and their classroom results. Thirty percent of school places are allocated to students with the highest marks, regardless of their socio-economic status. The remaining 70% of places are allocated to students across four different socio-economic "tiers" according to area of residence. The tiers are calculated based on: average family income; adults' level of educational attainment; share of homes that are owner-occupied; share of single-parent households; share of the population speaking a language other than English; and the performance of schools in the local area. A share of the top performing students within each tier is offered a place. In 2013, approximately 40% of offers were made to students from the 2 most socio-economically disadvantaged tiers (FRB of Chicago, 2016[21]).
- New York, United States: The "specialised high schools of New York City" are nine selective public high schools for academically and artistically gifted students. To enter, students in Grades 8 and 9 take the common Specialised High Schools Admissions Test. Students from disadvantaged backgrounds are provided with access to free lessons to help them prepare for the entrance examination.
- Selected Local Education Authorities (LEAs) in England, United Kingdom: There are approximately 164 grammar schools in England, where student performance on the "11-plus examination" determines entry. Students can opt to take the "11-plus" examination in the last year of primary school at the age of 11. To encourage enrolment among students from lower socio-economic backgrounds, some grammar schools develop relationships with the community and with school teachers to help identify high ability students from lower socio-economic backgrounds that may be interested in attending the school and work with their parents to encourage them to apply. Some schools also provide assisted-place

schemes that cover or subsidise costs for travel, uniforms and textbooks, while others try to ensure that around a quarter of their annual student intake is from more disadvantaged communities.

Sources: Ho, C. (2017[20]), "Angry Anglos and aspirational Asians: Everyday multiculturalism in the selective school system in Sydney", https://doi.org/10.1080/01596306.2017.1396961; UCL Institute of Education (2015[13]), *Research into the Impact of Selective Schooling and School Composition, Secondary School Size, and Academies and Free Schools for the Guernsey Education Department Research*, https://www.gov.gg/CHttpHandler.ashx?id=97557&p=0; Barrow, L., L. Sartain and M. de la Torre (2016[22]), *The Role of Selective High Schools in Equalizing Educational Outcomes: Heterogeneous Effects by Neighborhood Socioeconomic Status*, University of Chicago Consortium on School Research.

Design the high school entrance examination to reduce negative backwash for teaching and learning

The examination's design will be very similar to the previous TEOG (see Table 4.1), based exclusively on multiple-choice questions and largely assessing discrete knowledge in abstract contexts. As it develops the question items for the new Grade 8 examination, the ministry should consider including more complex items based on real-world situations assessing competencies and higher-order skills. These kinds of items are easier to achieve with open-ended questions. However, in Turkey, the need to process results for a very large number of students in a short period of time coupled with the need to maintain the highest degree of objectivity means that machine-scored multiple-choice items are likely to remain the predominant item type for the foreseeable future. There are ways, though, that these items might be improved to focus teaching and learning on more complex competencies.

One option would be to replace some of the existing items with multiple-choice questions that present students with more complex tasks in authentic contexts, similar to the item types used in the OECD Programme for International Student Assessment (PISA) for example. The first step would be the development and approval of new test specifications, including the weighting for items specifically targeted at measuring higher-order cognitive abilities (e.g. analysis, synthesis and complex problem solving) in authentic contexts. Schools, teachers and the general public would then need advanced notice of the proposed change. At the same time, the Directorate of Measurement, Evaluation and Examinations would need to train item writers in the development and evaluation of high-quality innovative items, i.e. items that depart from the traditional format by, for example, using authentic data or previously unseen stimulus material to test competencies beyond recall or routine application of knowledge. Examples of the new item types with explanatory notes could then be published. Finally, the directorate would need to publish examples of complete tests to ensure that all stakeholders are fully informed before new test formats are introduced.

The directorate has recently taken steps in this direction. A number of the questions in the 2018 samples shared with the public are designed to assess higher-order competencies. In particular, the sample mathematics questions employ some multi-stage problem solving which should require students to demonstrate higher order cognitive skills. There has also been an effort to set questions in real-world contexts, however, it is important these contexts are relevant and accessible for test takers and do not unfairly disadvantage (or advantage) certain groups, like those who might already be familiar the stimulus material. The OECD was informed that subsequent improvements have been made to the test items, both with regards to the authenticity of tasks and to the focus on higher order thinking skills.

The General Directorate of Measurement, Evaluation and Examinations (MEES) should also consider including semi-objective constructed-response items, such as multiple matching, ordering and short-answer types which can be processed automatically using character recognition technologies (see Recommendation 4.2.2). The Directorate has also piloted, through ABİDE, the use of short-answer questions for Grade 8 students with their responses scored on-screen by human markers. Human marking enables the use of items with more extended answers. However, while this approach may be a possibility for the future and deserves further investigation, the practical demands of processing a huge number of answers in a short time and the need to achieve complete agreement between markers to avoid appeals, means it is unlikely to be a practical solution in the medium term.

Improve the discriminatory power of the examination

Following the 2018 reform, many more students will be taking the entrance examination than the number of available places, making it critical that it discriminates effectively among students, especially at the top of the ability range. However, this will be difficult, given the limited number of items and the possibility to guess correctly when responding to a multiple-choice question. This was a recognised problem with the TEOG. The score distributions from the 2017 TEOG show that some sub-tests had limited psychometric properties; for example, the modal score for the Turkish language test was 100% suggesting that it had little power to discriminate in the upper half of the ability range. In 2017, more students received top marks in the TEOG examination than the number of places that were available in the top schools. It will be important for the directorate to pay closer attention to the discriminatory capacity of the new examination if it is to play its ability-placement function effectively. Sample items should be pre-tested explicitly for this purpose. This should be combined with results analysis after the examination to determine how effective actual items were, with appropriate adjustments implemented to improve the examination's discriminatory power over time.

Policy issue 4.2. Ensuring that examinations at the end of compulsory education serve effectively the functions of certification and selection

At the end of upper secondary education, examinations should fulfil two major functions. First, they should help provide each school leaver with certification of their achievements and ensure that they have met the minimum requirements for graduation. Second, they should provide the information necessary to inform decisions on further education and eligibility for tertiary education.

While Turkey has a school-leaving diploma for students who complete upper secondary education, this does not serve a qualification and certification function as effectively as it might. The diploma is based solely on classroom assessment marks without any standardised measure of achievement. Since classroom assessments are not centrally designed, administered or marked, they are perceived to provide less reliable information than central examinations. Consequently, they carry less credibility or "signalling value" for future employers and further education providers and have less utility for students with respect to advancing in work or in learning. For this reason, the majority of OECD countries (21) use central or national examinations at the end of upper secondary education to certify student achievement (OECD, 2015[23]). In Turkey, developing a recognised form of certification at this stage should be a priority and will be essential for achieving a more inclusive secondary school system.

Another concern for the university placement examinations is that while they serve their primary administrative function to place students in tertiary education programmes effectively and efficiently, they dominate teaching and learning throughout high school. Students, parents and teachers devote significant time and energy in preparing for the examination that focuses on knowledge recall and does not assess the higher-order competencies that are important for tertiary success. While it might be difficult to reduce significantly the influence of the examination, whose high stakes are accentuated in Turkey by the limited access to bachelor's programmes, there are ways in which the university placement examination could be redesigned so that it has a less negative backwash effect on student learning.

Recommendation 4.2.1. Develop a national examination to help certify achievement at the end of compulsory education

The absence of any external examinations to certify student achievement against national curriculum standards at the end of upper secondary school is a notable gap in Turkey, especially as the country wants to ensure all students complete this level of education. At present, the only recognised signal of student achievement at the end of upper secondary is the university placement examination. However, the sole purpose of this examination is selection to tertiary education. It is by necessity discriminating, with more than half (63%) of the examination's candidates in 2016 failing to obtain sufficiently high marks to be placed in any kind of tertiary programme (MoNE, 2016[8]). This leaves the majority of candidates leaving high school with no meaningful recognition of what they have achieved. In contrast, the majority of OECD countries provide all students with the opportunity to certify their achievements and demonstrate that they have met the minimum requirements of compulsory schooling. The small minority of OECD countries that do not provide the weight of externality for high school completion, relying, like Turkey does, solely on classroom-based results and only providing a standardised examination for entry to tertiary education – Korea, for example – not only have very different school and tertiary systems but have also recognised this as an obstacle to effective skills development (Kis and Park, 2012[24]).

Turkey should consider developing a national examination that gives all students the chance to gain recognition for their achievements at the end of upper secondary school. This would be a significant change that will require careful planning and communication to students, parents, teachers and schools. Great care and technical expertise would be needed at all stages of designing and implementing the new examination. The process of agreeing on the concept, building a model, piloting instruments and procedures, building public awareness and support, and finally implementing the system would take at least five years. For example, introducing a new *matura* examination system in Slovenia took six years from the initial policy decision in 1989 to the conduct of the first live examinations in 1995 (Bethell and Gabrščeek, 1996[25]). In introducing such an examination, Turkey would need to consider the following points.

Determine the main purpose of the school-leaving examination

In developing an examination for certification at the end of upper secondary education, a fundamental first question to address will be whether to have a single examination that serves the purpose of both high school completion and tertiary selection or two separate examinations. In many OECD countries, the same examination is used to certify upper secondary completion and select students into tertiary (see Box 4.4) (OECD, 2015[23]). Such dual-purpose systems have significant advantages. They allow all assessment

instruments (e.g. test papers) to be closely aligned with the content and target outcomes of the school curriculum. They reduce pressure on students because they only have to prepare for one set of examinations rather than two. They also increase the efficiency of the system because examinations are administered once rather than twice. However, designing an examination system that serves both functions well is technically challenging because the examination items must produce score distributions which are sufficiently reliable across the full range of student ability. Some countries approach this by organising examinations at different ability levels, for example, Ireland.

While this might be a model for Turkey to move towards in the longer term, there are several reasons why a two-stage approach might be both more feasible and desirable now. Students who reach this final stage of education in Turkey have very diverse levels of learning and face very different future opportunities. Around half will be graduating from vocational schools and only a minority of all students will go onto study a bachelor's degree. In this context, it would be very hard to develop a single exam that certifies fairly the achievement of all school graduates while at the same time identifies effectively aptitude for tertiary-level study.

Moreover, Turkey already has a system of two-stage examinations at the end of high school. The TYT is open to all students and according to its name, aims to assess "basic proficiencies". With the changes outlined below to the way students are assessed – including the introduction of a passing threshold based on demonstrated minimum proficiency in core, and perhaps also, some optional subjects – the TYT might be developed to help serve a certification function, while also remaining the first filter in the university placement system. Under this new system, the AYT could be retained as the final selection and placement tool for tertiary education. In this case, the AYT would only need to focus on effectively discriminating at the top of the ability range meaning that the examination items could be modified and improved to better assess higher order competencies (see Recommendation 4.2.2). Given the extent of overhaul to the high school entry examination, incremental reform to this high-stakes examination for university entry might be more feasible politically and socially.

The governance of this system would need to be addressed. At present, the Placement Centre is responsible for both the TYT and AYT, on the basis that their primary purpose is progressive selection for tertiary education. Developing the first examination into a school-leaving style examination for certification at the end of upper secondary would require a change in this arrangement, with the General Directorate of Measurement, Evaluation and Examinations (MEES) in the ministry, managing the examination design to ensure its alignment with both the curriculum and the broader intent of upper secondary education policy in Turkey.

Box 4.4. School leaving examinations in Lithuania and Ireland

In **Lithuania**, the *matura* examination held at the end of upper secondary education serves the dual purpose of certifying school completion and providing access to tertiary education, including state-funded places for tertiary education. The *matura* can be taken at the state-level in biology, chemistry, physics, geography, information technologies, mathematics, history and foreign languages, while locally-assessed school-level *matura* examinations can be taken in minority languages, arts, musicology and technology.

In order to complete upper secondary education, students must pass two *matura* examinations: a compulsory examination in Lithuanian language and literature and another examination in a subject chosen by the student. Students who wish to pursue tertiary education in universities must take the Lithuanian language and literature *matura* at the state-level. Certain tertiary education institutions may also set their own individual requirements for admission. In order to obtain state funding for tertiary education, students must pass three *matura* examinations in Lithuanian language and literature (state-level), mathematics (state-level) and a foreign language.

Ireland's Leaving Certificate Examinations are final examinations taken at the end of the secondary school system. The Leaving Certificate serves two purposes: it certifies school completion and provides access to tertiary education. The examinations are available in a variety of subjects including Irish language, English language, mathematics, natural sciences, humanities and the arts. Students can take a combination of higher-level and ordinary-level examinations.

The grades from these examinations are converted into points, with the total number of points determining access to the tertiary education course the student has applied for. The Central Applications Office runs this university admissions' process. Students can also opt to take two subjects, Irish language and mathematics at the foundation level. The Irish language examination at this level equals zero points and only certain institutions consider granting any points to mathematics at the foundation level. However, students can combine these foundation-level examinations with other higher or ordinary level examinations to collect enough points to gain access to certain universities.

In order to certify school completion, students must pass examinations at any level in five subjects. Students who meet this criterion are also able to access post-secondary non-tertiary courses that usually last one year and, in many cases, provide access to tertiary education institutions.

Sources: OECD (2017[26]), *Education in Lithuania*, http://dx.doi.org/10.1787/9789264281486-en; Department of Education and Skills, Ireland (2018[27]), *The Education System, Ireland*, https://www.education.ie/en/The-Education-System/ (accessed 01 March 2018).

Determine which subjects will be assessed

In developing the structure and content of the examination system, Turkey will need to determine which subjects will be compulsory and which will be optional. In countries where a core of compulsory subjects is defined, a national language (state language or mother tongue) is almost always included, with mathematics as the next most common requirement (Hodgen et al., 2010[28]). These subjects represent the fundamental cognitive competencies that any student should master at a basic proficiency level by the end of

schooling and provide an essential foundation for successful participation in the modern knowledge economy. This approach would also reflect the current organisation of Turkey's national curriculum, where Turkish and mathematics are taken by all students until the end of upper secondary education. Providing certification would help to value and incentivise achievement in these core areas.

Beyond this, there is considerable variety in approaches globally and across the OECD in the subjects examined at the end of upper secondary education (Dufaux, 2012[29]). This reflects differences in how countries balance breadth and depth of learning at this stage of schooling and the extent of freedom given to students in their specialisation. Overall, however, there seems to have been a general trend in recent years towards reducing the number of compulsory subjects in favour of more student choice, and limiting the total number of examined subjects to address concerns of excessive pressure and overload. In a country like Turkey, which aims to develop a strong vocational education pathway, this is an important consideration. While having examination results in mathematics and Turkish could help to add weight to the certification vocational and technical graduates receive, too many compulsory subjects could reduce the time for authentic vocational alternatives, where students can develop specialised expertise.

Developing the vocational track will also require developing credible assessments to certify skills acquired in specific technical and vocational domains. Turkey has started to do this, by developing specialised vocational and technical qualifications provided by the Vocational Qualifications Authority, but so far only a couple of sectors are covered.

Determine how the examination will be marked

Since the purpose of the school-leaving examination would be to ensure that students have met minimum standards, criterion-referenced marking would be most appropriate. To do this, Turkey might consider using a scaled system that covers a range of marks to express results. Different options include numbers (e.g. 1-6), letters (e.g. A-F) or names (e.g. pass, pass with merit, etc). The categories could also be used to create a threshold to access short course programmes International Standard Classification of Education (ISCED 5) and determine eligibility for the AYT examination. This would also help to ensure that the school-leaving examination does not encourage an excessive focus on individual marks, opening up the possibility to use a broader range of question types and teacher or school-based assessments as part of the examination.

Consider the types of questions that will be used

In the past, the high stakes associated with central examinations in Turkey and the associated need for objectivity and transparency meant that multiple-choice items capable of automatic scoring were preferred. However, the school leaving examination would carry lower stakes because students would only need to reach a minimum threshold to access short course tertiary programmes or to be eligible for the second-stage university placement examination (AYT). In this context, Turkey could use the school leaving examination to introduce more open question items. This would help to enhance the educational value and validity of the examination.

In the short term, this might include more open questions that are still capable of automatic scoring, such as semi-objective constructed response items and questions set in real-world contexts (see Recommendation 4.1.3). In the future, a small number of manually marked items may be also incorporated. In the majority of OECD countries, graduation examinations include some open items and in some cases long essays (OECD, 2015[23]).

While this requires manual marking, which is time-consuming and inevitably introduces a degree of subjectivity, the ability to assess broader and higher competencies is accepted by these countries to outweigh any potential loss of reliability. Building understanding and trust in the new certification system in Turkey will be important for the country to move in this direction.

Consider including a small share of teacher-assessed work

Turkey will also need to decide which, if any, elements of a school-leaving examination will be assessed by teachers in schools. The challenges of achieving reliable marks from teacher-assessed work are considerable. This is a particular concern in Turkey given the difficulties teachers have expressed in being able to confidently exercise professional judgement to determine the level of student work according to national standards (Kan, 2017[14]).

However, written central examinations can only assess a limited part of the curriculum. In contrast, teacher assessments can use a broader range of assessment tools like projects, group work, experiments and presentations where students are required to draw on broader skills and competencies like communication, creativity and teamwork (OECD, 2013[30]). This is particularly important in Turkey, where these kinds of skills have so far been neglected by the assessment system, despite being introduced to the national curriculum over a decade ago. Teacher and school-based assessments also provide the opportunity for students who typically perform less well in a high-pressure examination setting to demonstrate their abilities. This is an important consideration for a school leaving examination that aims to provide all students with a fair chance to show what they know and can do.

In the short term, Turkey might keep the share of marks that teacher or school-based assessments contribute to the overall examination result relatively small. At the same time, guidance for the teacher or school-based assessment component and moderation could be used to encourage reliability. This will need to be complemented by system-wide efforts to help teachers confidently assess student work according to national standards (see Chapter 3 and Recommendation 4.2.3). Over time, as teachers' assessment capacity increases, the share of marks that the teacher or school-based assessment component contribute to the final result might increase.

Recommendation 4.2.2. Enhance the validity of the university placement examination

The high stakes associated with the university placement examination means that the focus for many students, teachers and parents throughout upper secondary is on achieving high marks in it. What is assessed in the examination, and how it is assessed, therefore has a strong influence on teaching and learning in upper secondary school. It was reported to the OECD review team that the university placement examination can negatively affect education in high schools because it does not measure fully the competencies that students should be acquiring at this level. In particular, there is a view that some of the items are too abstract (i.e. not sufficiently concrete and/or related to real-world contexts) and have tended to focus more on the recall of factual knowledge and/or routine procedures than on higher order cognitive skills. There is also a concern that the examination and its previous forms have not been as effective as they might be in terms of discriminating students' aptitude for tertiary level study, precisely because they do not focus sufficiently on higher-order

competencies (Sıdkı Ağazade et al., 2014[31]). Finally, the organisation of the examination could be adapted to place less pressure on students when they are taking the examination.

Make fuller use of technology to enable a wider range of item types

Some steps have already been taken to assess a broader range of skills and knowledge in the Grade 12 examinations. The new TYT, like the previous YGS, includes some items clearly designed to test problem-solving skills in authentic contexts. The sample of items studied in 2018 suggested that these types of question were well developed in mathematics, but less apparent in other subject areas like Turkish language, where the focus was more on assessing discrete knowledge and skills like grammar, spelling and punctuation. And while the previous version of the second stage examination, the LYS, had included a small number of constructed response items, there seems to have been a step back with the 2018 version, the AYT, which was based exclusively on multiple-choice questions. This leaves considerable scope to improve the validity of the examination. This review's recommendations from the Grade 8 examination – notably the proposal to introduce more items set in real-world situations and more constructed response items (see Recommendation 4.1.3) – should also be considered here. The OECD review team was informed that the examinations for 2019 already reflect a new approach to item development, with students presented with more authentic tasks and more questions that require the use of higher order thinking skills.

The introduction of a wider range of question items will require the use of more sophisticated technologies for marking examinations. The Placement Centre (ÖSYM) currently employs optical mark reading (OMR) technology, which severely restricts the type (and complexity) of answers that students can give. Introducing optical character recognition (OCR) technology for scoring student responses would allow for the use of a greater variety of item types, all still capable of automatic scoring. There are many international examples where OCR is used in scoring high stake examinations in contexts where the security and transparency of the examinations are of paramount importance (see Box 4.5).

Give students more time and reconsider how the correction formula is used to reduce the pressure on students

The high demand for university places means that applicants will always be under pressure. However, there are some elements of the current system which exacerbate the situation and which could be rectified in the short to medium term. First, the average time allowed students to solve each task is far shorter than is the case in comparable examinations. While the time per question has been increased as part of recent changes (for example, from 1 minute per item in the YGS to 1.125 minutes in the TYT), it remains a time-stressed examination, as is the new AYT. In contrast, the previous TEOG examination allowed 2 minutes per time. As a starting point, ÖSYM might consider allowing 2 minutes per item plus 15 minutes. This should then be checked through a field trial, i.e. by applying a test and monitoring over time how many students finish the test.

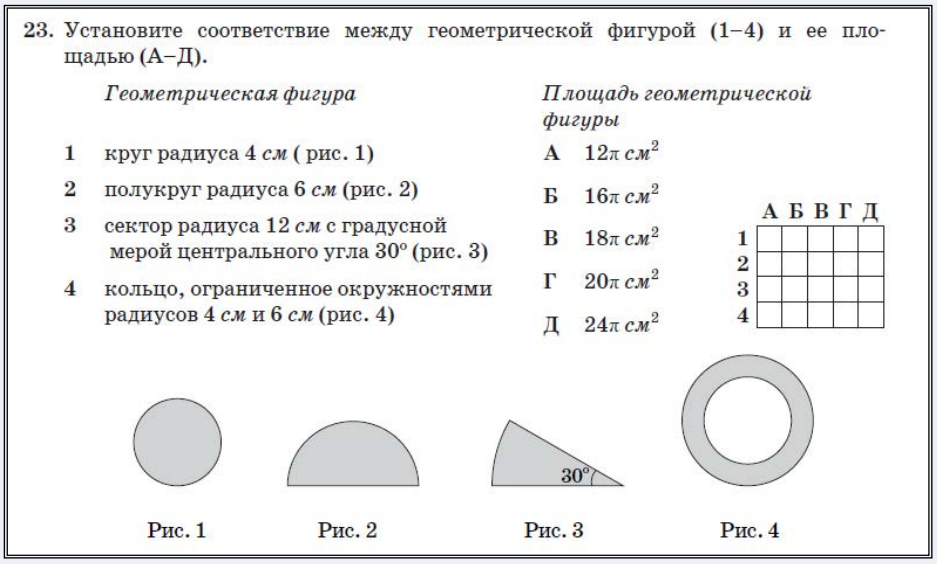
Second, the items used in the university placement examinations are, by design, complex and relatively difficult. However, students are placed under increased psychological pressure by the knowledge that incorrect answers are penalised. Research shows that the impact of applying a "correction for guessing" has little impact on the reliability of a test since corrected and uncorrected scores are highly correlated ($r>0.95$ according to Ebel (1972[32])). Taking into account that the instruction "do not guess" misdirects candidates

(statistically speaking, they would be better off guessing unknown items even when there is a guessing correction), Mehrens and Lehmann (1986[33]) conclude that "correction for guessing should not be used". The ÖSYM should investigate the impact of the application of its guessing correction formula with a view to using unadjusted scores for the university placement examination. In addition, highly speeded tests, i.e. tests where many items have to be answered in a short time, increases the likelihood that candidates will guess, meaning that increasing the time allowance as recommended above will ameliorate, but not solve, the problem.

Box 4.5. Using optical character recognition (OCR) technologies in high stake examinations

OCR technologies are able to convert images of handwritten or printed text into machine-encoded text. This means that they enable the use of a variety of question formats including standard multiple-choice, complex multiple-choice, multiple-matching; clustered true/false, ordering, and short-answer constructed response (words or numbers). A number of countries including the Czech Republic, Georgia, the Russian Federation and Ukraine use OCR technologies to score high-stake examinations at the interface between secondary school and universities. An example of a question from Ukraine is provided below. Other international examples are provided in Annex 4.A.

Example: Mathematics question in multiple-matching format from the Ukrainian Admission Examination (2015). Translation of the question and the completed answer grid is included below:



23. Установите соответствие между геометрической фигурой (1–4) и ее площадью (А–Д).

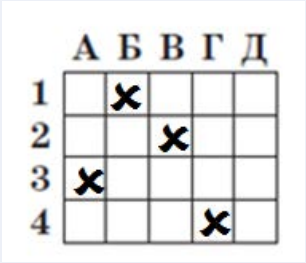
	Геометрическая фигура		*Площадь геометрической фигуры*
1	круг радиуса 4 *см* (рис. 1)	А	12π *см*^{2}
2	полукруг радиуса 6 *см* (рис. 2)	Б	16π *см*^{2}
3	сектор радиуса 12 *см* с градусной мерой центрального угла 30° (рис. 3)	В	18π *см*^{2}
4	кольцо, ограниченное окружностями радиусов 4 *см* и 6 *см* (рис. 4)	Г	20π *см*^{2}
		Д	24π *см*^{2}

	А	Б	В	Г	Д
1					
2					
3					
4					

Рис. 1 Рис. 2 Рис. 3 Рис. 4

Match the shaded area of each geometrical shape (1-4) with the correct area (А- Д):

1. Circle of radius 4cm
2. Semi-circle of radius 6cm
3. Sector having radius of 12cm subtending an angle of 30
4. A ring with radii 4cm and 6cm.



Source: Ukraine Centre for the Evaluation of Educational Quality (2015[34]), *Ukrainian Admission Examination*.

Reduce the grades that contribute to the final placement score

The placement score for tertiary study in Turkey incorporates classroom assessment marks from Grades 9 to 12. Including marks from assessments other than the examination provides the opportunity to assess a broader range of competencies (OECD, 2013[30]). However, in Turkey, there are a number of challenges with how the classroom assessment marks are used which limit these pedagogical benefits, in addition to concerns about their reliability.

First, students and teachers reported to the OECD review team that classroom assessments frequently replicate the content and types of question items that the examination uses, i.e. tests based on multiple-choice items. This means that the classroom assessments are narrowing rather than broadening the skills, knowledge and competencies that students are encouraged to develop and demonstrate during high school.

Second, using the classroom assessment marks from the beginning of high school to calculate the university placement score may also create undue pressure on students and limit space for learning. Teachers and students are less likely to engage in the kinds of formative interaction where students feel comfortable to reveal what they do not know because from the first semester, marks matter.

Third, assessment results from the early grades of high school student may not be an accurate reflection of ability or effort. Students who have just started high school are still adjusting intellectually, emotionally and socially to a new school and phase of their education. Student performance frequently dips after these kinds of school transitions.

For all of these reasons, the ministry should adjust the system to take into account the school marks from Grades 11 and 12 only in the final placement score. This would reduce the pressure on students and give them more time to adjust to their new school. It would also create more space for teachers to use a broader range of assessments in the early grades and give more time to formative feedback. The reliability of the overall placement score would not be significantly damaged by this change and indeed the validity of the assessment could be raised by increasing the weighting of the components having greater predictive power. Taking the steps outlined below to improve the quality of classroom assessments in Grades 11 and 12 (Recommendation 4.2.3) would enhance further their pedagogical and psychometric value.

Consider how to draw on wider sources of evidence for university placement in the future

Over time, Turkey might consider using other sources of evidence to determine entry to tertiary education. Across 32 OECD member countries, only 2 other countries (Greece and Hungary) rely, like Turkey, on the results of a central examination and average grades from classroom assessments to determine entry to tertiary institutions (OECD, 2017[35]). Other sources of evidence frequently used alongside central examinations to determine admissions across OECD countries include interviews, applicants' work experience, volunteer work, recommendations and a written statement from the applicant. Turkey's centralised placement system has the strength of being transparent and largely objective, which is essential in a context where competition is so high. However, as access expands and the tertiary sector becomes more diverse, it will be necessary to reflect on the value that other sources of evidence might bring in terms of matching student aptitudes to course requirements and enabling alternative pathways into tertiary education.

Recommendation 4.2.3. Improve the reliability and validity of school-based assessments

Including school marks in composite examination scores provides scope for a range of different types of assessments at multiple occasions and in different contexts to inform a student's final score. In Turkey, the university placement examination already includes school marks to calculate the final score and this report has recommended that Turkey consider basing a proportion of the final mark in the new school leaving examination on teacher-based assessments (see Recommendation 4.2.1). However, the classroom assessment marks that have contributed to the university placement examination in the past have simply duplicated the assessment tasks of the central examination. Teachers' marks are also reported to vary significantly across different schools.

Provide teachers and schools with instructions for the school-based components of examinations

At present, central regulations for classroom assessment in Turkey provide broad guidelines, including the types of assessments to be used, e.g. examinations or projects and some expectations for their frequency (see Chapter 3). This leaves teachers with significant freedom in terms of the assessments used. However, in the years approaching centralised examinations, teachers tend to rely on multiple-choice questions that are easy to use and mark, and help students practice for their upcoming examination.

To encourage teachers to use a broader range of assessments like investigations, group work or extended essays, the ministry might provide more detailed instructions to teachers and schools on how and what they should be assessed as part of school-based assessments that contribute to central examination results. This is important to improve the validity of the examinations by ensuring that the skills assessed are a more accurate reflection of those set out in the curriculum. It can also help to reduce the negative backwash of the examinations and enhance their positive impact on student learning.

For example, the school leaving examination and/or university placement examination might specify that for the school-based components for Turkish, the mark should be derived from two assessed written tasks per semester. Teachers could be given freedom to choose suitable topics for investigation but the assessment criteria and the number of marks available for each would be prescribed. Instructions would be provided on the nature of

those written tasks, e.g. format, length, genre, to ensure that those written tasks do not use multiple-choice items and assess a broader range of skills than can be assessed during the examination. To ensure more reliability in the marks, teachers would be given criteria for scoring their students' work. In developing this kind of guidance, Turkey can draw on the types of resources provided for teacher-assessed work or "coursework" for examinations in other countries (see Box 4.6).

Box 4.6. Coursework for the Cambridge IGCSE syllabus for English as a First Language

The International General Certificate of Secondary Education (IGCSE), offered by Cambridge Assessment International Education, is an international qualification for 14-16 year-olds that involves written and oral coursework as well as practical assessments. Coursework is developed by students and marked by their classroom teachers, with the grades contributing to their final mark.

The examination syllabus requires candidates to develop a coursework portfolio with three assignments:

- Assignment 1: informative, analytical and/or argumentative writing. For example, students may be asked to write a short diary providing information on activities they undertook over a weekend, i.e. writing to inform.
- Assignment 2: imaginative, descriptive and/or narrative writing. For example, students can write a detailed description of people who go to a local shop, i.e. writing to describe.
- Assignment 3: a response to a text or texts chosen by the school writing. The text(s) should contain facts, opinions and arguments. Candidates respond to the text(s) by selecting, analysing and evaluating points from the material. They may write in any appropriate form they wish. For example, using letters published in a local newspaper to analyse and evaluate the views and information present on a particular topic, students can write an article for the newspaper, i.e. writing to analyse.

The assignments are graded based on clear guidelines provided by the IGCSE that explain standards of achievement to the teachers.

Source: UCLES (2018[36]), *Cambridge IGCSE Subjects*, http://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-secondary-2/cambridge-igcse/subjects/# (accessed on 20 February 2018).

Ensure a sufficiently robust system for standardising, checking and moderating the marks awarded by teachers

Incorporating school-based assessments into any examination raises the problem of reliability and, in particular, inter-school comparability. This challenge is particularly acute for the high stakes' university entrance examination, the AYT. The teacher-assessed marks contribute between 30 and 60 marks to the overall university placement score, which in the context of high demand for places and the determinant role of the placement score, means that every point counts.

There are three main methods of moderation to support the reliability of the marks from school-based assessments:

- **Consensus moderation:** involves bringing groups of teachers from different schools together in order to train them in the application of the assessment criteria, and bring their judgements into line through the review of common examples of student work and discussion.
- **External moderation:** involves reviewing student work in a school by the central examining authority, such as the General Directorate of Measurement, Evaluation and Examinations or the ÖSYM. Schools are usually required to submit a defined sample of work for reassessment. Using evidence from this sample, the central authority may make an adjustment to the marks submitted in order to bring the school into line with others.
- **Statistical moderation:** involves the use of statistical methods to compare (correlate) school-based results and examination scores to identify schools submitting marks that lie outside expected bounds. The process can then apply a "correction factor" to the marks of a school where the examination scores differ significantly from the school-based marks. While this is an objective and efficient method, there are three major challenges to the use of statistical moderation. First, it fails to take into account the fundamental differences between the skills assessed in schools and those assessed by external tests. Second, such statistical methods are rarely appropriate in the case of small schools where measurement errors are large. Third, whilst the application of a statistical correction may move the average school mark in the right direction it may, at the same time, disadvantage individual students by applying an unwarranted penalty to their scores.

Turkey's new provincial assessment centres, in collaboration with the ministry and the ÖSYM, would be best placed to introduce moderation as they combine technical expertise with some proximity to schools. In the short term, they might use external and/or statistical methods to improve the reliability of the marking practices of schools within their provinces. Where reviews revealed concerns about the reliability of schools' assessment marks, the centres would be expected to work with the schools to develop training and support to address this. In the future, as teachers' assessment capacity improves – through improved teacher understanding of the curriculum's learning goals, initial and continuous preparation, teacher appraisal and school evaluation – school-level groups for moderation will take on a greater role.

Policy issue 4.3. Developing and making available better-quality data on national learning outcomes

In Turkey, creating a fair high school placement system that does not distort teaching and learning will ultimately mean reducing the stakes associated with placement by ensuring that all students can attend a good school. A crucial step in improving school quality will be making available more and better-quality information on the learning outcomes of Turkish students. This is important for effective policies at the system level, and for improving practices in classrooms and schools.

Through participation in TIMSS and PISA, policymakers in Turkey can see how student outcomes compare with those of students in other countries and monitor progress over time with respect to standards of knowledge and skills regarded as important internationally. However, these assessments do not provide information on student achievement against national learning objectives. Nor are they designed to provide information on individual students and institutions at a frequency that would support ongoing improvement efforts at

the level of classrooms and schools. International assessments are only conducted every three to four years across a nationally representative sample of students. Countries need more granular national data on learning outcomes to inform policy and practice and monitor progress. National data are also important for interpreting the results of international assessments, especially when they indicate a significant change in a country's learning outcomes that cannot be explained by international data alone (as was the case with Turkey's 2015 PISA results, see Chapter 1).

However, in Turkey, policymakers and schools have very little national data that can be used for these purposes. In an understandable desire to avoid exacerbating the highly competitive atmosphere that surrounds examinations, the ministry restricts the examination data made available to schools. School principals can see the results of their own students but not those of other schools. This means that they cannot evaluate their own performance with precision nor can they make meaningful comparisons. As a consequence, most schools focus on their examination scores as an indicator of quality. Since students' examination performance is influenced by a range of factors beyond a schools' control this is unlikely to be an accurate indicator of quality (OECD, 2013[30]). Providing teachers and schools with more comprehensive and contextualised feedback on examinations would help them to better understand how they are doing and what they can do to improve.

Providing schools with more data on examination results will still leave major gaps in the availability of reliable information to monitor learning. Turkey currently uses classroom assessments marks from Grades 5 and above for school evaluation and system monitoring purposes but these marks are highly variable in all countries and especially in Turkey where teachers report difficulties in determining students' levels of learning in line with national expectations. This means that it is not possible to reliably monitor learning at any point in primary or lower secondary, or during upper secondary, or to identify which groups of students or regions perform significantly below the national average. Most OECD countries and an increasing share of emerging economies use national large-scale assessments for these purposes. In Turkey, a system for this is in the early stages of development with *ABİDE*, and the new initiatives introduced in association with Turkey's Education Vision for 2023.

Recommendation 4.3.1. Provide schools with meaningful examination data to improve teaching and learning

For schools to be able to critically evaluate how well they are supporting their students to learn, they need some comparative data on examination results across other schools nationally. In Turkey, schools are not provided with sufficient examination data to allow them to make direct comparisons with other schools, making it difficult for principals to evaluate their school's overall relative performance or that of particular groups of students. Nor is adequate information provided about students' responses to different examination items, limiting the insights that teachers, schools and the education system, in general, can draw to support improvements in practice.

Provide schools with more comprehensive examination data

The university placement examinations yield a huge amount of valuable data, which with more secondary analysis could help schools understand much better the outcomes of their students. Examination data can reveal important information about the equity of learning outcomes at a school by showing how different groups of students for example, by gender, socio-economic group or mother tongue, are performing. Such data also enables a school

to understand how their results compare regionally and nationally and with other similar schools. The ministry and the Placement Centre (ÖSYM) should work together to develop an enhanced system for reporting examination data in forms which would answer these and other questions without allowing the undesirable construction of school "league tables". This reporting would follow the same principles that are outlined below for ABİDE (see Recommendation 4.3.2).

Provide item-level analysis to improve teaching and learning

Teachers and schools also need information that enables them to identify how students responded to specific examination questions and/or groups of questions. For example, they need to know which items proved particularly difficult and how students, on average, responded to such items. This allows teachers to adjust their approach to teaching problematic topics in order to improve future performance.

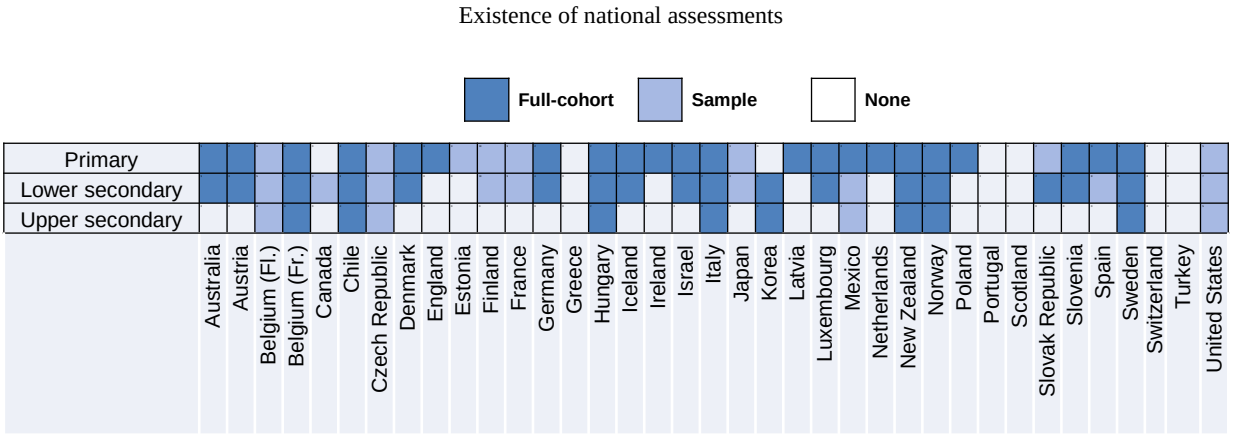
Under the previous TEOG system, the General Directorate of Measurement, Evaluation and Examinations had established the foundation for this by publishing past examination papers and making them freely available on line along with the correct answers for each item. In addition, basic item statistics (level of difficulty and discrimination indices) were published in a summary analytical report. These statistics enabled teachers to identify which items students found easier or more difficult. However, reporting the share of students who responded correctly to an item does not provide information about the kinds of errors that students made overall (e.g. which incorrect options did they tend to choose). It would also be helpful for teachers to understand the profiles of the students that answered a question incorrectly. For example, did all students find a specific question difficult or only those of, say, below average ability?

The ministry and the ÖSYM should make analytical reports available for all their examinations including test score distributions and student response statistics for all items. This kind of item-level analysis, especially for the new high school entrance examination, is also critical to ensure that questions are accessible to students from all backgrounds. This will build on the ministry's existing efforts that bring together teachers to review the Grade 8 examination questions for potential bias (e.g. gender) and accessibility.

Recommendation 4.3.2. Implement ABİDE as a fully developed national assessments in primary and lower secondary

Across the OECD, the vast majority of countries (30) have national assessments to provide reliable data on student learning outcomes that is comparative across different groups of students and over time (see Figure 4.1). When accompanied by background questionnaires, such assessments also provide insights into the factors that are influencing learning nationally and across specific groups. In Turkey, ABİDE has the potential to address a major gap in national data and expand perceptions of student achievement beyond success in national examinations towards a broader vision of learning that is more in tune with Turkey's education and development goals. The new initiatives launched in association with the 2023 Education Vision promise to enhance yet further this approach, in particular through their emphasis on formative feedback to students and timely remediation. For this to happen, the purpose of *ABİDE* first needs to be clarified and, based on this, decisions taken with respect to the feasibility and desirability of different aspects of the assessments' design and implementation. It will also be important to clarify the purpose of ABİDE in relation to other, more recent assessment initiatives, in order to ensure complementary and manage the assessment load.

Figure 4.1 Full-cohort and sample national assessments in OECD countries



Note: Data on Germany reflects VERA-3 and VERA-8 national assessments. Germany also organises a sample *National Assessment Study (Ländervergleich).*
Sources: OECD (2015[23]), *Education at a Glance 2015: OECD Indicators*, http://dx.doi.org/10.1787/eag-2015-en; INEE (2015[37]), *¿Qué es PLANEA? [What is PLANEA?]*, www.inee.edu.mx/images/stories/2015/planea/fasciulosnov/Planea_1.pdf.

Create a steering committee to guide the development of ABİDE

The first step to converting ABİDE from a pilot project to a sustainable system of national assessment should be the establishment of a high-level representative steering committee (Greaney and Kellaghan, 2008[38]). The steering committee would provide guidance to the General Directorate of Measurement, Evaluation and Examinations as it develops ABİDE. This will be important to ensure that ABİDE is perceived to be a legitimate instrument for assessing learning outcomes, in a context where the main focus of school and system-level performance are the examination results in Grades 8 and 12. The establishment of a steering committee would also help to raise the status of the assessment nationally and promote the use of its results.

The steering committee should include representatives of key education actors in Turkey from the ministry, provincial education directorates, schools and teachers. It should also consider how the needs of students with special needs and those whose mother tongue is not Turkish will be represented in the group. The steering committee might also include some representatives from educational research groups and academics. International experts with experience of developing national assessments in other countries could be engaged on an ad hoc basis to provide advice.

Define the purpose of ABİDE

At present, ABİDE seems to have been developed for to the primary purpose of providing reliable and comparative data to measure learning outcomes against the national curriculum. This reflects the main function of national assessments internationally and should be a primary function of ABİDE as part of a national evaluation framework focused on improving student learning outcomes.

Internationally, national assessments also support two other broad purposes. One is to provide information to teachers, schools and students that can be used to enhance learning. While this may be regarded as an overarching objective of all national assessment systems, the extent to which it is a central function varies considerably across countries. Having a

strong formative goal influences important design questions, such as whether the assessment will measure the attainment of a representative sample of students or should provide data on every child in a given grade. Where improvement at school and classroom level is a primary goal, individual student and school data are important. Such data can be particularly valuable in contexts where there are concerns that students are not meeting minimum learning standards, where teacher assessments do not provide reliable indicators of student learning, and where teachers and schools need more external support to understand and address performance gaps. All these concerns are evident in Turkey, making it important that ABİDE is developed in a way that supports these formative functions.

Another, though more contentious, use of national assessments is as part of school and in some cases teacher accountability frameworks. Using national assessments for accountability purposes can undermine their monitoring and improvement functions, in particular, if there are high stakes attached, such as using data to publish a school ranking or penalise (or reward) staff. However, when assessment data is contextualised and used alongside other information to gain a comparative perspective on school outcomes, it can provide valuable objective input to a school evaluation and accountability system. This report provides suggestions as to how this might be done in Turkey in a way that avoids high stakes and distortions to the other purposes (see Chapter 5). These are all questions and trade-offs that the steering committee will need to review when they provide advice on the purpose of ABİDE and its design features. Turkey will need to consider whether *ABİDE* should also have these functions and if so, ensure that this reflected in the assessment's design. Decisions on *ABİDE* will likewise impact, and also need to take into account, plans for new national assessment initiatives launched after the analysis for this review was completed: namely, the Student Learning Achievement monitoring assessment, the Turkish Language Skills Study and the Common Examinations initiative

Finally, one specific point will be to clarify the extent to which ABİDE might also be used to trial new types of question items for use in the new high school entrance examination (the OECD was told one of ABİDE's intended functions was to trial new items for the previous TEOG examination). While ABİDE should be developed to include more complex items than those currently used in examinations – this is important if it is to serve as a means to monitor and support the implementation of Turkey's curriculum – the need to ensure sufficient precision of measurement and high standards of reliability mean that it should not be used as a testing ground for examination reform.

Continue with plans to implement ABİDE in Grades 4 and 8 and make at least one a full cohort assessment

The purposes that Turkey decides for ABİDE will shape its design. For system monitoring, Turkey's current plans to focus ABİDE in Grades 4 (end of primary school) and 8 (end of lower secondary) should be continued. With the ending of the TEOG, Turkey will no longer have any standardised assessment of student learning in lower secondary schools and there is no reliable national data of learning in primary schools. Turkey needs quality information on student attainment of curriculum standards at these two levels of basic education.

At present, Turkey seems to be planning to use sample-based assessments in both grades, with samples designed to be representative at the provincial level. If ABİDE is to fulfil a strong formative function and enhance school accountability, then Turkey should consider extending these assessments to the full cohort of students. Among OECD countries and partner economies using national assessments, almost half (14) countries conduct full

cohort assessments at both primary and lower secondary levels (see Figure 4.1). OECD countries use full cohort assessments to provide information about the school environment and learning levels across schools as part of efforts to raise educational quality overall and as part of accountability frameworks (see Box 4.7).

Box 4.7. Using full cohort national assessments to improve teaching and learning

The National Assessment of Academic Ability in Japan

In 2007, the Japanese government decided to extend its periodic sample assessment to an annual full cohort assessment. The National Assessment of Academic Ability now assesses all Grade 6 and 9 students in mathematics and Japanese language every year and in science every three years. The rationale for the change was to provide information on learning outcomes and school conditions nationally to support equity and equality and use this information to help improve teaching across the country. The assessment is also used to identify any challenges around the implementation of national education policies. The results identify specific areas in subjects where students need more help and provide comparative data on school performance across regions.

The National Assessment Program in Literacy and Numeracy (NAPLAN) in Australia

Since 2008, Australia has administered NAPLAN annually to all students in Grades 3, 5, 7 and 9. NAPLAN assesses literacy and numeracy, and reports student performance in reading, writing, spelling, grammar, punctuation and numeracy. It provides schools with information to monitor student progress and identify students in need of additional support. The assessment is also used to monitor performance at state and national levels, to inform policymaking at both levels.

Student performance is reported on a 1-10 national achievement scale, with national minimum standards defined each year. Following the assessment, schools are provided with a detailed report on individual students' results, which is also shared with parents. The report shows each child's result in comparison with other children in Australia. The results are also published at the school level to serve as a monitoring tool and inform improvement practices.

Sources: MEXT (2016[39]), *OECD-Japan Education Policy Review: Country Background Report*; OECD (2013[30]), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, http://dx.doi.org/10.1787/9789264190658-en; Santiago, P. et al. (2011[40]), *OECD Reviews of Evaluation and Assessment in Education: Australia 2011*, http://dx.doi.org/10.1787/9789264116672-en; NAPLAN (2017[41]), *National Assessment Program, Australia*, www.nap.edu.au (accessed on 20 November 2017).

However, full cohort assessments are costly and in the short term, Turkey is likely to need to prioritise where it invests its resources. Across the OECD, full cohort assessments are most common at the primary level. This focus on the early grades is informed by growing evidence that mastery of foundational competencies (reading, writing and numeracy) in the first years of school is critical for learning outcomes later on and that interventions at this age can be more effective and less costly than when students are older (French, 2013[42]). In Turkey, the fact that only a fifth of 3-4 year-olds attend early childhood education programmes signals that a strong focus on developing foundational learning skills should be a policy priority. A national assessment in primary school could also support recent reforms in Turkey to encourage more formative assessment (and less summative marking)

in the early grades, by building the validity of teachers' feedback and confidence in their judgements. Turkey has already taken steps in this direction with the recently introduced Student Learning Achievement Monitoring assessment and Turkish Language Skills Study.

While Turkey might first extend ABİDE to all students in primary schools, this would still leave a notable gap in data at the lower secondary level. Across the OECD, all but five countries have either a full cohort assessment or a compulsory central examination in lower secondary (OECD, 2015[23]). In Turkey, a significant share of students falls behind during lower secondary. Results from the international assessment TIMSS show that by the end of Grade 8, a third of Turkish students do not reach basic proficiency in mathematics and science, compared with only a fifth of students in Grade 4 (Mullis et al., 2016[43]).

Turkey might balance the costs of full cohort assessments with the education system's information needs by conducting a census and a sample-based approach in alternate years and/or grades. An example is Mexico's new National Plan to Evaluate Learning (*Plan Nacional de Evaluación de los Aprendizajes*, PLANEA), which alternates full cohort with school and national sample assessments in different years and grades to provide useful, timely and reliable data for national and school needs (see Table 4.3). Any sample assessment will need to be sufficiently large to yield data that is representative at the provincial level, so that differences in learning outcomes and the learning environment across provinces can be monitored.

Table 4.3. An example of a national evaluation framework: Mexico's PLANEA

	2015	2016	2017	2018	2019
3rd year of pre-school			SEN		
4th year of primary	DC	DC	DC	DC	DC
6th year of primary	SEN, CE	CE	CE	CE	SEN, CE
3rd year of lower secondary	SEN, CE	CE	CE	CE	SEN, CE
Last year of upper secondary	CE	CE	SEN, CE	CE	CE

Note: SEN refers to assessment of the national education system, CE to assessment of schools and DC to census-based formative assessment.
Source: INEE (2015[37]), *¿Qué es PLANEA? [What is PLANEA?]*, www.inee.edu.mx/images/stories/2015/planea/fasciulosnov/Planea_1.pdf.

There are steps that Turkey can take to avoid that any full cohort assessment becomes associated with high stakes for students, teachers or schools. For example, Turkey might only publish aggregated national results and provide individual student results only to students and their parents. More detailed breakdowns of individual school performance and comparisons across different schools would be restricted to schools and policymakers. Importantly as Turkey is considering a new performance evaluation system for teachers, national assessment data should not be used as the basis for decisions on career progression. This is because this practice can narrow the curriculum that is taught by encouraging teaching to the test and is unfair for teachers, because students' results are shaped by a range of factors beyond their control, including prior learning (see Chapter 5). These considerations apply equally to the use of examination data (see Recommendation 4.3.1).

Address other key questions for the implementation of ABİDE

In addition to the above, the directorate and ABİDE's steering committee would need to reach an agreement on the following questions, as part of the framework for the implementation of ABİDE:

- **Determine ABİDE's frequency:** to monitor learning for improvement and accountability purposes, full cohort assessments will need to be run at least every two years. This will ensure that data provides an accurate, up to date perspective on teaching and learning in the country. If Turkey decides to alternate between full cohort and sample assessments as in Mexico, sample assessments for the main purpose of monitoring national trends could be administered every three or four years. Efforts should be made to ensure that the cycles of sample assessments complement, and do not duplicate international assessments.
- **Decide which subject areas will be assessed:** in Grade 4, ABİDE might focus on literacy and numeracy, since competency in these core areas provides the building blocks for study across a wider range of subject areas in the later years of school. Among OECD countries with national assessments in primary, a third (10) assess just mathematics and reading and writing in the national language (OECD, 2015[23]). Limiting the assessment to two subjects will also reduce the costs of administering the assessment to the full cohort on an annual or biennial basis. In Grade 8, mathematics and Turkish language might be assessed as the core subjects each time the assessment is administered. In order to reflect the breadth of the secondary curriculum, as well as creating the scope to focus on subjects that are considered to be national priorities, additional subjects like science, social sciences and a foreign language might be assessed on a cyclical basis in different years. Among OECD countries, assessments at this grade most frequently assess sciences, a foreign language and social sciences, in addition to mathematics and reading and writing (OECD, 2015[23]).
- **Background questionnaires:** the pilot of ABİDE in Grade 8 already included background questionnaires for students, teachers and school leaders. It should continue to accompany the full cohort assessment with some background questionnaires to collect information on the factors that are influencing learning and in particular, the factors that might be causing certain groups of students to perform below the national average. However, to reduce costs as well as any disruption to teaching and learning, only a sample of students and their teachers and school leaders taking the assessment might be asked to respond to the questionnaires for each cycle of the assessment.

Use the national assessment to improve teaching and assessment literacy

If *ABİDE* – and other newly introduced national assessment initiatives – are to serve an improvement function, Turkey will need to support schools and teachers to use the results. The ministry should consider developing a report following each national assessment for teachers in specific grades and subjects. Such a report might highlight areas where students commonly experience difficulties. Many countries provide this kind of report following their national assessments (see Box 4.8). Suggestions for classroom practice might be made to help teachers address these common difficulties. The report might also identify particular groups of students who tended to perform less well than their peers on average, providing

teachers and schools with suggestions on how such students might be better supported in the future.

Box 4.8. Reporting student responses in the United States' National Assessment of Educational Progress

Since 1969, the National Assessment of Educational Progress (NAEP) has been administered as the largest, ongoing national assessment of student learning in the United States. It assesses what students know and what they are able to do in a variety of subjects including mathematics, science, reading and writing in Grades 4, 8 and 12. Student performance is reported in two ways: as average scores achieved on each question in a particular subject and as the percentage of students attaining achievement levels as set by NAEP. In this way, although school-level and individual student-level results are not provided, the results report on what the students know and what students are able to in a specific subject at a particular grade level.

NAEP also publishes reports for teachers that identify the errors students most commonly make. The reports provide a question-specific breakdown of student performance as can be seen in the example of a Grade 8 science assessment report below:

Report on student assessment in science, Grade 8, 2011

What atoms combine to make up a molecule of water?

- (A) 1 hydrogen, 1 oxygen
- (B) 1 hydrogen, 2 oxygen
- (C) 2 hydrogen, 1 oxygen
- (D) 2 hydrogen, 2 oxygen

This multiple-choice question asks students to identify what atoms make up a water molecule. Fifty-four percent of eighth-graders answered the question correctly (Choice C). The most common incorrect answer (Choice B) was selected by 34 percent of the students who incorrectly recalled the chemical formula of the compound by associating two atoms with oxygen, rather than hydrogen.

Percentage of eighth-grade students in each response category: 2011

Choice A	Choice B	Choice C	Choice D	Omitted
8	34	54	4	#

Rounds to zero.
NOTE: Detail may not sum to totals because of rounding.

The table below shows the percentage of eighth-grade students performing at each achievement level who answered this question correctly. For example, 69 percent of eighth-graders at the *Proficient* level selected the correct answer choice.

Percentage of eighth-grade students responding correctly at each achievement level: 2011

Overall	Below *Basic*	At *Basic*	At *Proficient*	At *Advanced*
54	40	55	69	82

Source: NCES (2018[44]), *National Center for Education Statistics*, https://nces.ed.gov (accessed on 5 January 2018).

The ministry and the assessment centres in the provincial directorates might work together to support teachers to draw on the results as a pedagogical resource in this way. This might include dedicated training to help teachers and schools interpret their results. In Victoria, Australia, teachers are provided with in-service courses to develop school leaders' and teachers' skills in interpreting the results from national assessments and examinations (Santiago et al., 2011[40]). The findings of the national assessment can also be used at the national level to develop better-targeted policies for educational improvement, and at a school level to inform school evaluations and improvement plans (see Chapter 5).

Conclusion

Turkey now faces the challenge of implementing changes to its national examinations and national assessment so that they value and encourage learning across the essential competencies needed for life and work, rather than success in high stakes examinations alone. While this is associated with many challenges, the country's efforts over the past decade to improve the examinations and ensure their integrity provide many strengths to build upon. These include institutions like the General Directorate of Measurement, Evaluation and Examinations and the Placement Centre (ÖSYM) with proven track records in delivering secure examinations, teachers willing and able to follow formal regulations in the conduct of school-based assessments and a public which, in general, demonstrates trust in those who administer the examinations that shape the life chances of young citizens.

Table 4.4. Policy recommendations

Policies issues	Recommendations	Actions
4.1. Enhancing the school placement and selection process at the end of Grade 8	4.1.1. Consider the system for high school placement to manage demand	● Ensure that students and parents understand how the new placement system will operate ● Develop transparent criteria for oversubscribed schools
	4.1.2. Provide more information to guide student choice, while improving flexibility between pathways	● Develop resources, like the new e-portfolios and career guidance, to inform students' high school preferences ● Create greater flexibility across upper secondary programmes
	4.1.3. Reduce any negative distortions created by the high school entrance examination	● Consider measures to ensure that students from disadvantaged backgrounds have a fair chance of accessing selective schools ● Design the high school entrance examination to reduce negative backwash for teaching and learning ● Improve the discriminatory power of the examination
4.2. Ensuring that examinations at the end of compulsory education serve effectively the functions of certification and selection	4.2.1 Develop a national examination that helps certify achievement at the end of compulsory education	● Determine the main purpose of the school-leaving examination ● Determine which subjects will be assessed ● Determine how the examination will be marked ● Consider the types of questions that will be used ● Consider including a small share of teacher-assessed work
	4.2.2. Enhance the validity of the university placement examination	● Make fuller use of technology to enable a wider range of item types ● Give students more time and reconsider penalising incorrect answers to reduce the pressure on students ● Reduce the grades that contribute to the final placement score ● Consider how to draw on wider sources of evidence for university placement in the future
	4.2.3. Improve the reliability and validity of school-based assessments	● Provide teachers and schools with instructions for the school-based components of examinations ● Ensure a sufficiently robust system for standardising, checking and moderating the marks awarded by teachers
4.3. Developing and making available better-quality data on national learning outcomes	4.3.1. Provide schools with meaningful examination data to improve teaching and learning	● Provide schools with more comprehensive examination data ● Provide item-level analysis to improve teaching and learning
	4.3.2. Implement *ABİDE* as a fully developed national assessment in primary and lower secondary	● Create a steering committee to guide the development of ABİDE ● Define the purpose of ABİDE ● Continue with plans to implement ABİDE in Grades 4 and 8 and make at least one a full cohort assessment ● Address other key questions for the implementation of ABİDE ● Use the national assessment to improve teaching and assessment literacy

Notes

[1] The analysis in this chapter is based on information provided to the OECD review team in early 2018. While subsequent changes are referenced, the OECD was not in a position to analyse the reformed examinations as introduced at the end of the 2017/2018 school year, nor later changes made to the item development approach.

[2] The Student Learning Achievement Monitoring assessment was introduced under the Ministry of National Education's 2023 Education Vision. It is intended to provide schools with diagnostic information on students' strengths and weaknesses in Turkish, mathematics and science. As of mid-2019, some 300.000 students in grades 4, 7 and 10 have participated in the assessment. The Turkish Language Skills Study assesses the competencies of students in four areas: listening, reading, writing and speaking. It has so far been conducted in 15 provinces prior to the nationwide placement exams, providing students with feedback on their Turkish language proficiency and suggestions on areas where they need to improve. The Common Examinations initiative refers to newly introduced joint examinations conducted at the provincial level. The purpose is to provide large-scale, comparable data on student performance as well as information for students themselves to better understand their proficiency gaps. The Ministry of National Education expects that the results obtained from these initiatives will be examined at the school level and used to inform the design of weekend courses to help students address areas of weakness. These initiatives were introduced after the analysis for this review was completed and are therefore not addressed in this report.

[3] Following the completion of the analysis for this review, the OECD was informed that a new item development approach had been adopted for the high school and university placement exams. This approach reinforces previous steps taken to situate questions in real-life contexts and assess higher order thinking skills. The Ministry of National Education is publishing each month sample questions to help students familiarise themselves with this new style of assessment.

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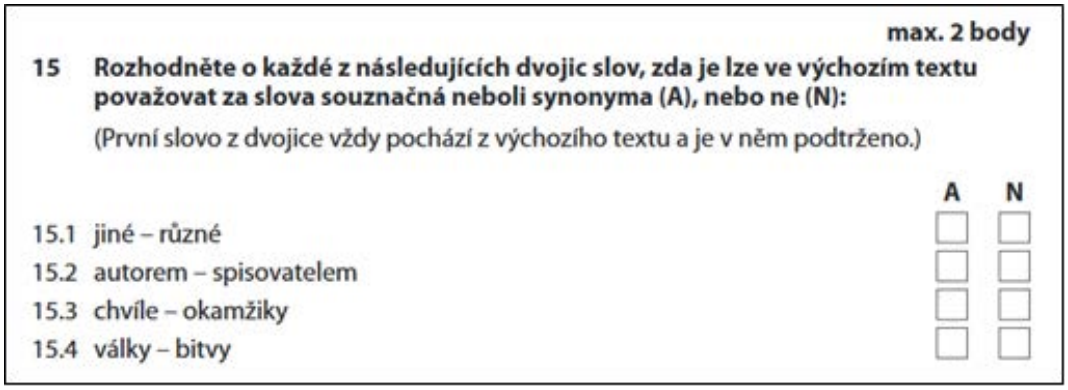
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Annex 4.A. International examples of using optical character recognition (OCR) technologies in high stakes examinations

This annex presents international examples of using OCR technologies in high stakes examinations from the Czech Republic, the Russian Federation and Ukraine.

Example 1: Mother Tongue item in the clustered true/false format from the Matura examination of the Czech Republic (2017). A partial translation of the task is: "Are the words in these pairs synonyms (A) or no (N)?".



max. 2 body

15 Rozhodněte o každé z následujících dvojic slov, zda je lze ve výchozím textu považovat za slova souznačná neboli synonyma (A), nebo ne (N):

(První slovo z dvojice vždy pochází z výchozího textu a je v něm podtrženo.)

		A	N
15.1	jiné – různé	☐	☐
15.2	autorem – spisovatelem	☐	☐
15.3	chvíle – okamžiky	☐	☐
15.4	války – bitvy	☐	☐

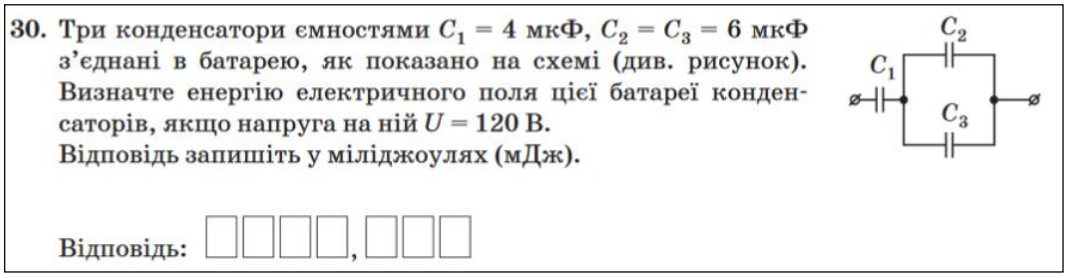
Source: (Centre of Educational Assessment (CERMAT), n.d.[45]), *Matura Examination of the Czech Republic (2017)*, Czech Republic, https://www.cermat.cz/.

Example 2: History item testing chronological ordering ("Order these four newspapers by the date of their printing.") from the Ukrainian Admission examination (2017). Here test takers mark their answers in the grid provided (upper right).



Source:, (Ukraine Centre for the Evaluation of Educational Quality, 2017[46]), Ukraine Admission Examination (2017).

Example 3: Physics item in the constructed response format from the Ukrainian Admission examination (2017). "Calculate the energy of the electric field in mJ".



30. Три конденсатори ємностями $C_1 = 4$ мкФ, $C_2 = C_3 = 6$ мкФ з'єднані в батарею, як показано на схемі (див. рисунок). Визначте енергію електричного поля цієї батареї конденсаторів, якщо напруга на ній $U = 120$ В.
Відповідь запишіть у міліджоулях (мДж).

Відповідь: ☐☐☐☐,☐☐☐

Here test takers write a numerical answer in the boxes provided as shown below. The hand written numerals are recognised by the OCR software.

Відповідь: ☐☐21,6☐☐

Example 4: Linked History items from the Unified State Examination (EGE) of the Russian Federation (2017).

The use of OCR gives test designers and item writers great flexibility and allows them to construct non-standard questions in interesting 'mixed formats'. For example, this History question combines two linked, selected response items. Task 18 says: "Look at the postage stamp and choose two correct statements about this stamp." Task 19 says: "Which two of the coins shown commemorate jubilees of events which happened during the life of a person on the stamp? Students are required to choose 2 from 5 in the first item and 2 from 4 in the second. They write their answers as numbers in the boxes below each item. These are then read by the OCR software.



Рассмотрите изображение и выполните задания 18, 19.

18 Какие суждения о данной марке являются верными? Выберите два суждения из пяти предложенных. Запишите в таблицу цифры, под которыми они указаны.

1) Военный деятель, изображённый на марке, подвергся репрессиям.
2) Военный деятель, изображённый на марке, родился в период правления в России Николая II.
3) События, изображённые на марке стрелками, произошли в ходе Первой мировой войны.
4) Военный деятель, изображённый на марке, был участником Великой Отечественной войны.
5) Данная марка была выпущена в период руководства СССР Н.С. Хрущёва.

Ответ: ☐☐

19 Какие из представленных монет посвящены юбилеям событий, произошедших при жизни военного деятеля, изображённого на марке? В ответе запишите две цифры, которыми обозначены эти монеты.

1)

2)

3)

4)

Ответ: ☐☐

Не забудьте перенести все ответы в бланк ответов № 1 в соответствии с инструкцией по выполнению работы.

Source: (Federal Service for Supervision in the Sphere of Science and Education (Rosobrnadzor), n.d.[45]), *Unified State Examination (EGE) 2017 (Единый государственный экзамен, ЕГЭ)*, Moscow, http://fipi.ru/ege-i-gve-11/demoversii-specifikacii-kodifikatory.

Chapter 5. Using the evaluation system to promote better assessment and learning

This chapter looks at how the evaluation system – teacher appraisal, school evaluation and system evaluation – interacts with practices for student assessment. While Turkey's evaluation system encourages teachers and schools to focus on student achievement, achievement is frequently measured by numeric marks. This encourages a perception that it is high marks which are most important for learning. It also means that policymaking decisions around student outcomes are not based on reliable and valid data, since marks from classroom assessment can vary significantly across classrooms and schools. This chapter suggests how teacher appraisal, school evaluation and system evaluation frameworks can be revised to encourage the kinds of quality assessment practices that research shows are most effective for learning.

Introduction

This chapter looks at the wider system for evaluation in Turkey – teacher appraisal, school evaluation and system evaluation – and how well it is aligned with national goals for learning and assessment. Policies in these areas have a significant influence on teaching and learning practices (OECD, 2013[1]). When well designed, they can provide powerful levers for transforming the instructional system so that it promotes the kind of formative assessment practices and higher order learning outcomes that are valued in Turkey's curriculum.

At the time of this review, significant changes were being discussed to both teacher appraisal and school evaluation in Turkey. This provides an opportunity to ensure better alignment between the learning practices and outcomes valued in the curriculum, and the objectives and procedures for evaluating teachers, schools and the system as a whole. Turkey already has established processes for evaluating teachers and schools and monitoring performance and learning outcomes across the education system. This chapter suggests how these processes can be used more effectively to support improvements in teaching and assessment. The chapter recommends that teacher appraisal and school evaluation focus less on summative test results and more centrally on the progress that students make in their learning, as a more meaningful measure of instructional quality. Developing a regular national assessment will also help to ensure that when outcomes data is used to inform evaluation, including for system monitoring, the inferences are fair, reliable and reflect the curriculum's learning goals.

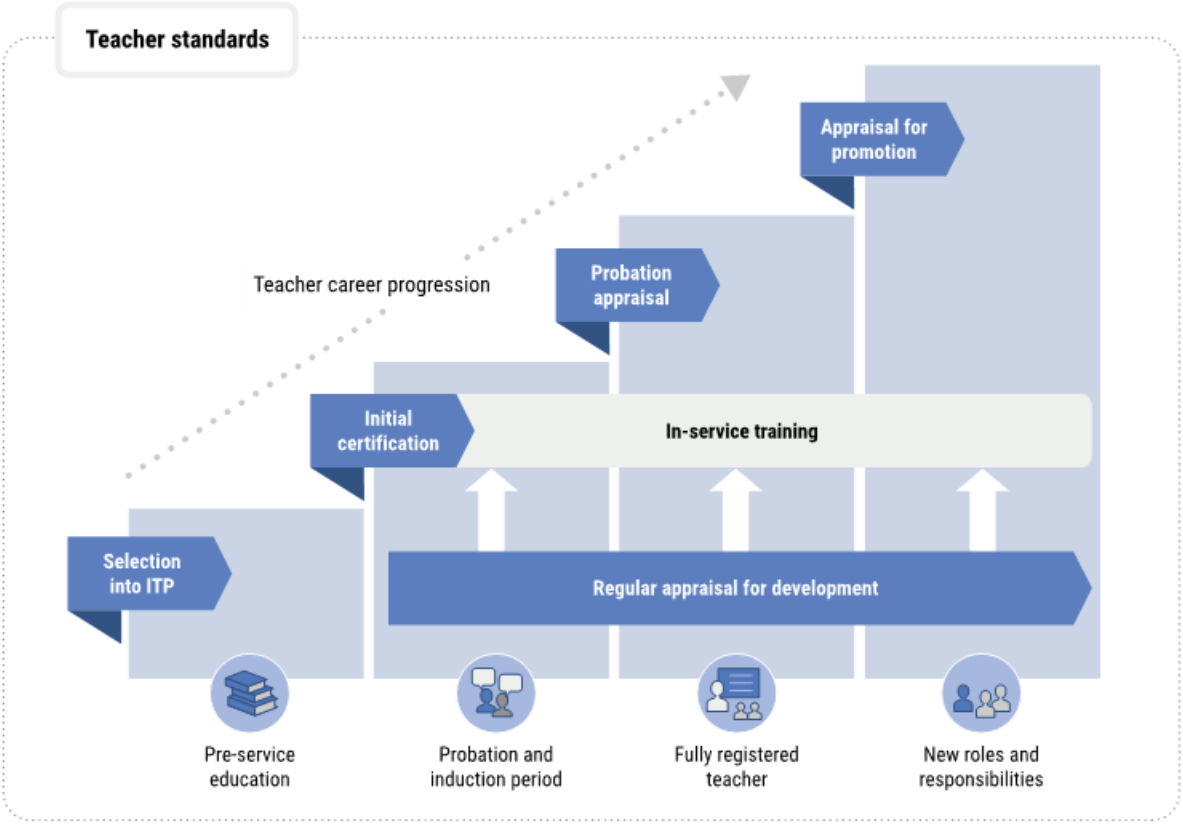
The chapter also looks at the extent to which teacher appraisal, school evaluation and system evaluation can be reformed to provide more feedback and encouragement to teachers and schools on what they can do to improve the quality of learning and assessment practices. A stronger focus on the quality of teachers' assessment practices and on school-wide policies that encourage teachers to continually develop their assessment skills would ensure that evaluation is used more effectively to support improvements in teaching and learning. More analysis from the Ministry of National Education (MoNE) and guidance from provincial directorates would also enable schools to make greater use of evaluation information. This would help schools understand better the factors currently preventing many students from making good progress and identify how to improve teaching and learning in response.

Context and main features of the evaluation system

Teacher appraisal

Teacher appraisal refers to how teachers are assessed and given feedback on their performance and competencies. Effective appraisal focuses on how well teachers are supporting the learning of all students. It provides teachers with support and incentives to continually develop their teaching competencies. When used effectively, appraisal can positively influence teachers' attitudes, motivation and classroom practices and, through this, help to improve students' learning outcomes (OECD, 2013[1]). Countries combine different types of appraisal at different moments of a teacher's career to inform ongoing learning, professional development, and career progression (see Figure 5.1).

Figure 5.1. Types of teacher appraisal



Significant changes were being made to appraisal at the time of the OECD review, as part of wider reforms to teacher policy (see Box 3.1). These include: the release of new teacher competencies; reforms to how in-service teacher are appraised within the school; and the introduction of a performance-based career path. These changes come in addition to recent revisions to how beginner teachers are evaluated, with the introduction in 2015 of both a structured probation appraisal and a system of mentorship. In many respects, these changes bring Turkey closer to the practice in most OECD countries, where there has been a trend in recent years to develop different appraisals for different stages of a teacher's career and for the different purposes of development and career progression. However, when the OECD review was being drafted many aspects of the new appraisal system remained unclear, in particular, the new system for appraising in-service teachers.

Turkey has recently published new teacher competencies

Like most OECD countries, Turkey has teacher competencies that are expected to guide teacher appraisal, as well as other areas of teacher policy such as the selection of teachers, initial teacher education and continuous professional development opportunities (OECD, 2007[2]). Teacher competencies encourage transparency and fairness in teacher appraisal by evaluating all teachers according to the same expectations. Most OECD countries also use competencies or standards to ensure that teachers develop the professional competencies

and use pedagogical practices that support national expectations for learning (CEPPE, Chile, 2013[3]).

As part of its teacher strategy, Turkey published new teacher competencies in 2017. In contrast with the previous competencies, which were heavy and complex with 233 performance indicators, the new competencies are more streamlined with just 65 performance descriptors. The new teacher competencies continue to be developed. In particular, it will be important that the new competencies are a central reference for the new process of appraising in-service teachers when it is developed. Based on the OECD team's review of the previous teacher competencies and appraisal criteria, it does not seem that the previous version of the teacher competencies guided the development of appraisal criteria.

It is also important the new teacher competencies are clearly linked to national learning goals. While Turkey's curriculum has emphasised competency development and a student-focused approach since 2006, the OECD team's review of the new teacher competencies in 2017 indicated that the section on "measurement and evaluation" still does not include clear expectations for teachers to use assessment practices that support these aims. For example, the new teacher competencies do not reflect the importance of teachers using a broad range of assessments that evaluate a range of different competencies or providing students with formative feedback that supports future learning.

Criteria for teacher appraisal focus on how frequently teachers demonstrate performance indicators

At present, the teacher appraisal form for probation and regular appraisal sets out 10 main competencies and 50 performance indicators to guide appraisal. The criteria focus on how frequently teachers display each individual performance indicator, rather than the quality of a teacher's assessment practices. Like the separate teacher competencies, the criteria on assessment could be changed to better reflect key practices that are important to support Turkey's learning goals in terms of competency development, or teaching in terms of a constructivist approach (see Recommendation 5.1.1). These criteria are likely to be revised, as part of wider reforms to appraisal.

A new performance appraisal is an underdevelopment

At present, all teachers are expected to receive an annual performance appraisal from their principal. This draws on authentic sources of evidence for teaching practice like classroom observation. It is also relatively low stakes, without consequences for career advancement or pay levels (OECD, 2015[4]). This reflects the practice in many OECD countries where regular appraisal is conducted at the school level and carries few stakes for teachers to encourage open discussion and formative feedback on a teacher's professional development (OECD, 2013[1]). However, teachers in Turkey reported to the OECD review team that appraisals did not always provide them with useful feedback to improve their assessment practices. This likely reflects, in part, the approach to marking for regular appraisal where teachers are evaluated on a scale of 0 to 4 according to how frequently they display each performance indicator and the scores are used to calculate an overall mark out of 200. This encourages principals to focus on ensuring compliance with the appraisal criteria, rather than appraising the quality of assessment practices. The numeric mark provides them with little understanding about their strengths and improvement needs, and teachers' reports suggest that the mark is not accompanied by descriptive feedback.

Another challenge of this approach to marking is that, since the marks for the student assessment competency only contribute a maximum of 20 marks to the overall appraisal score, a teacher might not demonstrate any of the performance descriptors for assessment competency and still reach the 100 out of 200 required to pass the appraisal. At the time of drafting this review in 2018, Turkey was planning to introduce a new performance appraisal of in-service teachers, however, the plans were still an underdevelopment.

A recently introduced probation appraisal is based on multiple types of evaluation

In 2015, Turkey introduced a new probation appraisal and induction programme for trainee teachers, with the aim of better supporting new teachers during their first year of teaching (ERI, 2017[5]). Following these changes, candidate teachers are now appointed to schools for their probation year, with a supervisor to support and mentor them. The supervisor also contributes to the candidate teacher's probation appraisal. Trainee teachers are formally appraised three times by three different evaluators during their probation year – the school principal, their supervisor and an education inspector from the local provincial directorate.

Trainee teachers who receive at least half marks in these appraisals progress to a written examination. Half the content of the written examination assesses trainee teachers' knowledge of general and education legislation, and half assesses their pedagogical knowledge including of student assessment. Trainee teachers who score at least 60% in the written examination become certified teachers and are appointed to their first teaching position. Those who do not are required to take an oral examination. Trainee teachers who do not successfully pass the oral examination remain a trainee for an additional year and start the probation period and appraisal in another school, with the associated training and teaching supervision. If they fail the probation appraisal after a second attempt they are dismissed.

Teachers progress up the salary scale primarily based on years of service and positive results from regular appraisals

Teachers' salary progression in Turkey is the same as the OECD average. However, experienced teachers at the top of the scale in Turkey receive only 17% more than new teachers at the bottom, compared to 71% more on average across the OECD (OECD, 2017[6]). Turkey also has a bonus system (appraisal for reward) that provides some teachers considered to be high performing with an additional salary allowance. Teachers who wish to be considered for the reward are evaluated first by their principal and then by inspectors from the district and provincial education directorates. However, this system does not focus on recognising or rewarding competencies specific to teaching, since it occurs as part of an annual government process that is the same for all staff across the Ministry of National Education (OECD, 2015[4]).

At present, there is also no formal differentiation in a teacher's roles and responsibilities as they progress in their career, though the new Teacher Strategy indicates that Turkey plans to introduce a performance-based career structure in the near future. By recognising and rewarding higher levels of teaching competencies, including for assessment, this could provide stronger incentives for teachers to develop professionally throughout their career. Turkey has not yet set out how it plans to appraise teachers for promotion within this new career structure. In most OECD countries, the main evaluator in an appraisal for promotion is a trained professional who is external to the school, in order to ensure independence and consistency in this high stakes decision.

School evaluation

In common with most OECD countries, schools in Turkey undergo external evaluations, called inspections, and are also expected to undertake self-evaluations. At the time of the OECD review, the system for school inspections was being revised and as a result, school inspections had been put on hold.

A new system for school inspection is being developed. In the past, school inspections have been conducted every three years by the inspectors' unit in the provincial education directorates following guidelines developed by the MoNE's Directorate of Guidance and Control. Inspections reviewed schools' compliance with indicators on education activities, management activities and financial processes. This included ensuring compliance with important positive changes in assessment practices, like reporting student achievement using performance descriptors in Grades 1 to 3 or undertaking at least one project per subject (see Box 5.4). On the other hand, the framework did not focus on key aspects of how schools use assessment, such as the quality of assessments or using a broad range of different types of assessment.

Under the previous system, a team of three to four inspectors undertook the inspection visit over a maximum of three days. The visit included classroom observations, interviews with school staff, and the parents and students on the school council. In the end, the inspectors met with the school management and teachers to share the results of the inspection. A report was also shared with the school administration with a list of recommendations setting out the school's areas for improvement. The school management team were expected to develop a school development plan based on the results within a month. The implementation of the plan was monitored by the provincial education inspectors.

Turkey has multiple frameworks for self-evaluation in different types of schools

Annual school self-evaluation has been compulsory in Turkey since 1999. Today, schools undertake self-evaluations and submit data through the Education Quality Management System. Primary and lower secondary schools are also required to undertake self-evaluations through the Basic Institutional Standards System. Vocational high schools have also had a separate self-evaluation system since 2014. The ministry has implemented and external evaluation of technical and vocational high schools and shared the results of this evaluation, which can be categorised under six themes, with the public (MoNE, 2018[7]).The frameworks for different self-evaluation processes are not clearly related to each other or to the framework for school inspection. The use of different self-evaluation systems seems to reflect the organisation of the ministry, where different directorates have developed their own self-evaluation procedures for the schools for which they are responsible. One of the key findings of the OECD's work across different countries' evaluation and assessment systems is that it is important to have clear and consistent goals that support national aims for improving learning and student outcomes (OECD, 2013[1]). The presence of multiple frameworks for school evaluation in Turkey risks that school evaluation does not strongly support a coherent national focus on national learning goals.

The Education Quality Management System

All schools undertake annual self-evaluations as part of the Education Quality Management System and use this information to identify areas for improvement. The framework for the Education Quality Management System includes a student's foundational learning outcomes across the curriculum. Turkey is now developing new competency-based assessment tools to collect this information. As part of the framework, schools also look at

aspects like school leadership, staff management and the school development plan. Schools are expected to create a self-evaluation team that includes the principal, other school administrators, teachers, students, parents and other stakeholders. School's self-evaluation reports are evaluated by the quality boards within the District and Provincial Education Directorates, and the best reports are shared with ministry (European Commission/EACEA/Eurydice, 2015[8]).

The Basic Institutional Standards System

The Basic Institutional Standards System was introduced in 2010 for primary and lower secondary schools by the MoNE's Directorate for Basic Education. It is a system for reporting and collecting information about schools, which schools are expected to use for self-evaluation, including identifying their strengths and areas that require improvement. The standards cover 3 areas, with 9 standards and 38 sub-standards, and are updated annually to reflect changes in the education system. The standards include a sub-standard on assessment and evaluation methods, which reflects some important aspects of assessment quality like ensuring that assessments reflect their intended purpose and take into account students' individual characteristics, and that the results are used for planning of teaching and learning (see Box 5.5) (MoNE, 2016[9]).

Schools are required to report annually on whether each sub-standard is present and whether it is functional, effective and useful. The information is provided by the school principal and management team with support from district and provincial directorates of education. The views of students, parents, teachers and directors are also collected. The reported information is used to produce a standard report for each school which is accessible at the school, district, province and ministry levels. The school principal is expected to evaluate their school's report, present it to the teachers' committee and identify the school's strengths and challenges to prioritise actions for improvement which is expected to feed into the school's development plan. District and provincial directorates of education are also expected to use the data from the institutional standard reports, as well as schools' development plans to monitor the school's progress during the year and in the development of the province's strategic planning. The ministry is also expected to use the reports to identify regions that are priorities for support and resources, to ensure effective distribution of resources from central to local levels.

System evaluation

Most OECD countries use a combination of qualitative and quantitative information in order to monitor the performance of their education system and identify where policies and practices can be improved. This includes administrative data on students, teachers and schools, assessment data, school evaluation information and thematic reports.

In Turkey, major investments have been made in how administrative data is collected and reported. Sophisticated electronic platforms like the e-School Management Information System provide parents with real-time information about their students' attendance and grades. Systems like e-School and the MoNE's Education Information System, MEBBIS, also mean that policymakers can monitor policy implementation, aided by the units for measurement and evaluation established in each directorate of the ministry. In the future, it will be important to undertake a greater analysis of information that is provided by schools so that it can contribute to policymaking and provide feedback to provinces and schools to help drive improvements.

Another consideration for system evaluation is reliable and valid information on learning outcomes. In order to monitor learning outcomes, system evaluation currently relies on test scores. However, in all countries, the standards that classroom assessments are based on tend to differ across classrooms and schools to some extent, raising questions about the reliability of test scores for system monitoring purposes. Also, despite efforts to improve teachers' capacity for classroom assessment, many teachers in Turkey often use multiple-choice or other simple assessments which cannot fully assess the country's broader learning goals.

The Strategic Plan 2015-19 makes improving student learning outcomes a priority

The Strategic Plan 2015-19 includes annual targets based on the average classroom marks of all students from Grades 1 to 5 in all subjects (MoNE, 2015[10]). Classroom assessments are marked by students' individual teachers. In order to encourage reliable marks for classroom assessment, many OECD countries use moderation within or across schools and national learning standards to encourage alignment with the curriculum (OECD, 2013[1]). The OECD review team's interviews demonstrated there is limited use of both practices in Turkey, which means that system evaluation may not be based on an accurate or valid measure of learning. At the end of the year, the ministry publishes progress against each of the Strategic Plan's indicators in an activity report. Provinces follow the same priorities as the national strategic plan and use a similar report template.

The introduction of new national assessments would provide valuable information on learning outcomes

Many countries also use data from national examinations to monitor learning outcomes since this provides reliable data. While this is also the case in Turkey, the country no longer has a compulsory national examination for all students. There are also concerns about the validity of examination data since they use predominantly multiple-choice questions assessing knowledge recall. While Turkey participates in international student assessments that provide information on learning against international benchmarks, the data is only available every three to four years and assesses learning using an international, rather than a national framework. Turkey is now developing national assessments – *Akademik Becerilerin İzlenmesi ve Değerlendirilmesi* (ABİDE), as well as the Student Learning Achievement Monitoring Assessment and the Turkish Language Skills Study – that would go a long way in addressing gaps in the instruments available to monitor learning outcomes and progress (see Chapter 4).

More analysis of information provided by the evaluation system is important. More in-depth analysis of the education system's data and evaluation information would help to better understand the factors that are impeding many students to make good progress. The review team's interviews highlighted a general understanding that the quality of teacher assessment is a concern, but there is little research into teachers' classroom practices or level of understanding of the assessment strategies required by the curriculum. A new project between the United Nations Children's Fund (UNICEF) and the MoNE's Directorate of Measurement, Evaluation and Examination of teacher capacity for classroom assessment is a positive step towards addressing this evidence gap. Schools can also be helped by a more systematic analysis of achievement data and information from school evaluations. This could help schools to be more aware of the learning areas where students commonly experience difficulties or the groups of students who tend to have greater difficulty to master content – and the kinds of classroom or school-wide changes that could be put in place for more effective learning.

Policy issues

Turkey's current reforms to teacher appraisal and school evaluation create the opportunity to revise its evaluation system to support national objectives for teaching, learning and assessment more effectively. The first step and clear priority will be to revise the learning outcomes that appraisal, school and system evaluation are based on in order to reflect the broad learning competencies set out in the curriculum. The current focus on test scores is hindering transformation of the education system away from a focus on knowledge recall towards broader and higher-order learning outcomes. Second, appraisal and school evaluation need to be better focused on the quality of assessment practices. The current plans to reform in-service teachers' regular appraisal and school inspection mean that these can be revised first, providing a reference for later revisions to probation appraisal and school self-evaluation. Third, the ministry can start immediately to undertake a greater analysis of evaluation information, which coupled with sustained efforts to develop capacity at provincial and school levels, will enable schools to draw more on information from the evaluation system to identify and implement strategies to improve how they use assessment.

Policy issue 5.1. Using appraisal to encourage and support teachers to employ good assessment practices

By assessing teachers and providing feedback on their performance, appraisal can have a significant impact on teaching, learning and assessment practices. Turkey has systems for probation and regular appraisal that include some of the dimensions considered important for the effectiveness of these processes. For example, the regular appraisal of in-service teachers is based on authentic evidence from classroom observation, follows a set timetable and is undertaken by principals who should be familiar with teachers' work. However, the review team's interviews with teachers and national research that highlights the range of challenges teachers face in developing and selecting appropriate tools for competency development (Kan, 2017[11]) suggest that appraisal is not currently serving as a lever to develop and modernise teaching practices. Appraisal for probation, although recently introduced, also does not seem to be ensuring that all new teachers enter the profession with the necessary teaching skills, including for assessment.

This chapter provides suggestions for how this can be addressed by creating stronger alignment between the education system's objectives for learning and the criteria that both types of appraisal are based on, which at present does not cover the breadth of assessment skills important for competency development or for student-led learning. It also suggestions how principals' competencies for undertaking appraisals and classroom observations can be strengthened, so that these processes contribute more effectively to teachers' assessment practices. Finally, it makes suggestions for how appraisal can provide teachers with more helpful feedback and create stronger links to professional development so that appraisal better supports teachers to develop their assessment competency.

Reforms that are planned to be introduced to reform the appraisal of in-service teachers and introduce a performance-based career structure may address some of these challenges. Revising fundamental aspects of the overall appraisal system, like the performance criteria it is based on and how classroom observations are conducted will be important if these reforms are to be effective. This will need to be followed by specific revisions for different types of appraisal, like developing standards for beginning and more experienced teachers.

Recommendation 5.1.1. Ensure that appraisal reflects the breadth and depth of assessment competency important for learning

The effectiveness of any evaluation and assessment practice depends on its alignment with an education system's objectives for student learning (OECD, 2013[1]). This means that teachers should be evaluated based on criteria and evidence that reflect national learning goals. However in Turkey, while the curriculum emphasises the need for teachers to use a broad range of assessment types to assess different competencies and engage students in their own learning, the OECD team's review of Turkey's appraisal criteria revealed that these assessment competencies are not included in the criteria (MoNE, n.d.[12]). Instead, the appraisal criteria focus on how frequently teachers display individual assessment practices, encouraging teachers and evaluators to focus on discrete activities in a compliance-oriented exercise, rather than considering the quality of assessment practices or how they interact to support student learning.

Ensure that appraisal is coherent with national learning goals

Turkey should ensure that its new teacher competencies are consistent with the goals for learning that are set out in the curriculum framework and learning standards that this review recommends the country develops (see Chapter 2). Other countries also use learning standards as the reference that guides the development of teacher standards. Australia's teachers' standards, for example, are explicitly based on the Melbourne Declaration which describes the country's aspirations for its young people for the next decade (AITSL, 2011[13]).

Second, Turkey should ensure that the guidelines and criteria used in different types of teacher appraisal are clearly based on the new teacher competencies. The OECD team's review of the previous teacher competencies and the teacher appraisal form suggests that the previous teacher competencies were not a central reference in the development of the appraisal form. The new teacher competencies should clearly guide the development of new performance criteria for appraisal.

Develop appraisal criteria that cover key competencies for assessment

Turkey's current reform to in-service teacher appraisal creates the opportunity to address gaps in the existing appraisal form's criteria for assessment. Teachers need to be competent in a variety of assessment skills including selecting, applying, using, communicating and evaluating student assessment information and practices (see Box 5.1). At present, the appraisal performance criteria on assessment cover some of these skills, like choosing appropriate tools and methods of evaluation and assessment (MoNE, n.d.[12]). But there are critical gaps including teachers' skills for developing their own assessments, using a variety of different assessment types and interpreting assessment results. These skills are especially important for assessing competency development because the latter requires the complex integration of different sets of knowledge and skills which can only be assessed through a range of different types of assessment. In other cases, criteria are ambiguous. For example, while feedback to stakeholders is specified, it remains unclear which stakeholders this is referring to and how feedback should be used to support student learning. Providing feedback to students helps them to progress to the next level, and engages them in their learning to develop transversal competencies like learning to learn.

Box 5.1. Standards for teacher competency in student assessment

The American Federation of Teachers has developed standards for teacher competency in student assessment, with the aim of helping to ensure that the potential educational benefits of student assessment are realised:

1. Teachers should be skilled in choosing assessment methods appropriate for instructional decisions.
2. Teachers should be skilled in developing assessment methods appropriate for instructional decisions.
3. Teachers should be skilled in administering, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods.
4. Teachers should be skilled in using assessment results when making decisions about individual students, planning teaching, developing curriculum and school improvements.
5. Teachers should be skilled in developing valid student grading procedures, which use student assessments.
6. Teachers should be skilled in communicating assessment results to students, parents, other lay audiences and other educators.
7. Teachers should be skilled in recognising unethical, illegal and otherwise inappropriate assessment methods and uses of assessment information.

Source: BUROS Center for Testing (1990[14]), *Standards for Teacher Competence in Educational Assessment of Students*, http://buros.org/standards-teacher-competency-educational-assessment-students (accessed 15 March 2018).

Assessment skills reflecting the curriculum's constructivist pedagogy are also absent. Constructivism encourages students to create understanding for themselves, guided by inquiry and questioning. Assessments like self-evaluation and peer-assessment are therefore important to this approach because they engage students in their own learning and reinforce learning as students critically and constructively review their own work and that of their peers. While both self- and peer-assessment are mentioned in Turkey's curriculum, they are absent from appraisal criteria.

New appraisal criteria should also encourage teachers (and their evaluators) to understand the complexity of the competencies that they are expected to demonstrate. This means referring to broad competencies or complex sets of skills, rather than pointing at "micro-level" competencies or describing only one task (Guerriero, 2017[15]). The current appraisal form in Turkey is based on a set of assessment-related performance descriptors that teachers are marked on individually, rather than referring to a broad set of competencies. This encourages teachers and evaluators to focus on individual assessment activities in a checkbox-focused exercise, rather than understanding the complexity and interaction of different student assessment competencies and practices.

Addressing these points in new appraisal criteria can be done in a relatively simple way, through statements of the kinds of practices teacher are expected to demonstrate in relation to assessment (see Box 5.2 for example). Guidance for evaluators should encourage them to use these statements or performance descriptors as a group of statements that clarify further the complexity of the competency requested, rather than as a checklist with each item considered individually (Guerriero, 2017[15]).

Box 5.2. The Scottish standard for pupil assessment for registered teachers

Use assessment, recording and reporting as an integral part of the teaching process to support and enhance learning

Registered teachers:

- Systematically develop and use an extensive range of strategies, approaches and associated materials for formative and summative assessment purposes, appropriate to the needs of all learners and the requirements of the curriculum and awarding and accrediting bodies.
- Enable all learners to engage in self-evaluation and peer assessment to benefit learning.
- Record assessment information in a systematic and meaningful way in order to enhance teaching and learning and fulfil the requirements of the curriculum and awarding bodies.
- Use the results of assessment to identify development needs at class, group and individual level and as a basis for dialogue with learners about their progress and targets.
- Produce clear and informed reports for parents and other agencies which discuss learners' progress and matters related to personal, social and emotional development in a sensitive and constructive way.

Source: The General Teaching Council for Scotland (2012[16]), *The Standards for Registration: Mandatory R equirements for Registration with the Central Teaching Council for Scotland*, http://www.gtcs.org.uk/web/FILES/the-standards/standards-for-registration-1212.pdf.

Illustrate assessment competencies with examples of effective practice

Providing examples of effective assessment practice can help make complex competencies accessible, provide teachers with a clear understanding of what they should be aiming towards and ensure that evaluators share consistent expectations when evaluating teachers. The latter is important in Turkey where current evaluators – principals and inspectors – need to be supported to develop expertise in the use of assessment. It is particularly important when appraisal carries high stakes for teachers, as is the case for probation and might be the case in the future if an appraisal for promotion is introduced within the new performance-based career structure. Other countries use examples of effective teacher practice, which state the practices that an evaluator might expect to see of a teacher demonstrating a given competency. This can also be illustrated with videos. Australia's teacher standards, for example, use videos to demonstrate expected competencies, including what an effective assessment sequence looks like (AITSL, 2011[13]). Such videos might be provided on line via Turkey's new *EBA* portal – both to support evaluators and as a resource that illustrates what teachers should be working towards (see Chapter 3).

Develop specific levels of assessment competency for different stages in the teacher career path

As part of the new performance-based career path that Turkey plans to develop, the country will need to set out the different steps of a teacher's career, e.g. graduate, proficient and experienced. The new career structure should make clear how teaching competencies, including for assessment, are expected to progressively develop during a teacher's career

and the different responsibilities that more experienced teachers are expected to take on. For example, Australia's "roadmap" teacher standards set out how teacher competency in assessment is expected to develop from graduates of initial teacher education to teachers at the most advanced career stages (AITSL, 2011[13]). The structured career path would need to be accompanied by a distinct appraisal process for a promotion that draws primarily on trained evaluators external to the school (such as the inspectors from the provincial education directorates) since it would carry high stakes for a teacher's career.

A new career structure and associated appraisal for promotion would ensure that teachers are recognised and rewarded for demonstrating increasing pedagogical competency, including in assessment. Such an approach would help to incentivise teachers to undertake professional development opportunities, especially on assessment where take-up is currently very low. It would also make better use of the professional capital that exists to generate systemic improvement. For example, experienced teachers might be expected to take on the role of assessment leaders or champions at the school-level as they reach more advanced steps in the new career structure. Given concerns about the depth and range of new teachers' assessment skills in Turkey, it is also important that the teacher competencies include a separate standard or expectations for graduates from initial teacher education, to provide a common basis for accreditation and help to ensure the quality of initial teacher education providers (see Chapter 3).

Focus on quality when evaluating assessment practices

At present, appraisal is based on how frequently teachers perform certain assessment activities. This can provide some insights about how a teacher uses assessment but will not reveal much about the quality of assessment practices, like how appropriate they are for assessing the targeted competency, how effective they are in revealing students' learning needs, or the range of assessments that teachers use. National research has highlighted that these are all areas where teachers in Turkey need to develop significantly their understanding and skills (Kan, 2017[11]).

Turkey should consider adopting an approach to evaluating teachers that describes different levels of teacher proficiency, accompanied by descriptors of performance at each level. Many countries have been inspired by the four-point performance scale in Danielson's Framework for Teaching of unsatisfactory, basic, proficient and distinguished. For the domain of student assessment, the framework describes teacher competency and behaviours at each of these levels and provides illustrative examples of a teacher performing across these (see Table 5.1) (Danielson, 2013[17]).

This approach to evaluating teachers would also provide regular appraisals with more meaningful formative information than the current marking process for appraisal, which gives teachers little information about what they should be working towards in terms of the quality of their assessment practices. For appraisals that carry stakes such as probation and promotion, it would also provide more transparency in terms of the benchmarks that teachers are being assessed against in order to become fully certified or to move to the next level on the teacher career path.

Table 5.1. Levels of teaching performance for designing student assessments in the Danielson Framework

	Unsatisfactory – Level 1	Basic – Level 2	Proficient – Level 3	Distinguished – Level 4
	Assessment procedures are not congruent with instructional outcomes and lack criteria by which student performance will be assessed. The teacher has no plan to incorporate formative assessment in the lesson or unit.	Assessment procedures are partially congruent with instructional outcomes. Assessment criteria and standards have been developed, but they are not clear. The teacher's approach to using formative assessment is rudimentary, including only some of the instructional outcomes.	All the instructional outcomes may be assessed by the proposed assessment plan; assessment methodologies may have been adapted for groups of students. Assessment criteria and standards are clear. The teacher has a well-developed strategy for using formative assessment and has designed particular approaches to be used.	All the instructional outcomes may be assessed by the proposed assessment plan, with clear criteria for assessing student work. The plan contains evidence of student contribution to its development. Assessment methodologies have been adapted for individual students as the need has arisen. The approach to using formative assessment is well designed and includes student as well as teacher use of the assessment information.
Critical attributes	● Assessments do not match instructional outcomes. ● Assessments lack criteria. ● No formative assessments have been designed. ● Assessment results do not affect future plans.	● Only some of the instructional outcomes are addressed in the planned assessments. ● Assessment criteria are vague. ● Plans refer to the use of formative assessments, but they are not fully developed. ● Assessment results are used to design lesson plans for the whole class, not individual students.	● All the learning outcomes have a method for assessment. ● Assessment types match learning expectations. ● Plans indicate modified assessments when they are necessary for some students. ● Assessment criteria are clearly written. ● Plans include formative assessments to use during instruction. ● Lesson plans indicate possible adjustments based on formative assessment data.	● Assessments provide opportunities for student choice. ● Students participate in designing assessments for their own work. ● Teacher-designed assessments are authentic, with real-world application as appropriate. ● Students develop rubrics according to teacher-specified learning objectives. ● Students are actively involved in collecting information from formative assessments and provide input.
Possible examples	● The teacher marks papers on the foundation of the United States Constitution mostly on grammar and punctuation; for every mistake, the grade drops from an A to a B, a B to a C, etc. ● The teacher says, "What's the difference between formative assessment and the test I give at the end of the unit?" ● The teacher says, "The district gave me this entire curriculum to teach, so I just have to keep moving".	● The district goal for the unit on Europe is for students to understand geopolitical relationships; the teacher plans to have the students memorise all the country capitals and rivers. ● The plan indicates that the teacher will pause to "check for understanding" but does not specify a clear process for accomplishing that goal. ● A student asks, "If half the class passed the test, why are we all reviewing the material again?"	● The teacher knows that his students will have to write a persuasive essay on the state assessment; he plans to provide them with experiences developing persuasive writing as preparation. ● The teacher has worked on a writing rubric for her research assessment; she has drawn on multiple sources to be sure the levels of expectation will be clearly defined. ● The teacher creates a short questionnaire to distribute to his students at the end of class; using their responses, he will organise the students into different groups during the next lesson's activities. etc.	● To teach persuasive writing, the teacher plans to have his class research and write to the principal on an issue that is important to the students: the use of cell phones in class. ● The students will write a rubric for their final project on the benefits of solar energy; the teacher has shown them several sample rubrics, and they will refer to those as they create a rubric of their own. ● After the lesson the teacher plans to ask students to rate their understanding on a scale of 1 to 5; the students know that their rating will indicate their activity for the next lesson. etc.

Source: Danielson, C. (2013[17]), *The Framework for Teaching Evaluation Instrument, 2013 Edition*, http://www.loccsd.ca/~div15/wp-content/uploads/2015/09/2013-framework-for-teaching-evaluation-instrument.pdf.

Use authentic evidence of classroom practice to identify underperformance

Turkey should determine a minimum threshold on the performance scale for evaluating teachers, e.g. basic, that teachers are required to meet. This would signal teachers' need for further support, which the current approach to marking does not since a teacher might not demonstrate any of the performance descriptors for assessment competency and still reach the 100 out of 200 required to pass the appraisal. Teachers who do not meet minimum competency thresholds should be required to undertake appropriate professional development.

Recommendation 5.1.2. Ensure that evaluators focus on authentic measures of teachers' assessment practice

Classroom observation is used for both probation and regular appraisal in Turkey, as it is in four-fifths of OECD countries (OECD, 2015[4]). The frequent use of classroom observation for appraisal reflects the fact that it is one of the most relevant sources of information about a teacher's performance since most aspects of teaching are displayed when a teacher interacts with their pupils in the classroom (OECD, 2013[1]). However, teachers and principals reported to the OECD review team that observation rarely focuses on the quality of classroom practices, including assessment practices. At the same time, the use of other sources of evidence like student test results might be reconsidered since they may not provide a useful reflection of the quality of teachers' assessment or teaching practices overall.

Improving the way evidence is collected as part of regular teacher appraisal would enhance its formative function, by providing more valid information of what teachers are doing well and where improvement might be needed. Ensuring the use of authentic measures of teaching quality will be equally important for appraisal processes that carry stakes for teachers, be this at the end of the probation period or in association with the new performance-based teacher career structure, where it is critical to ensure that teachers have the required competencies to progress to the next level.

Provide more guidance for evaluating assessment practices during classroom observation

One way to improve the quality of classroom observation would be to provide principals and other evaluators in Turkey with rubrics that focus on a limited number of indicators that are observable during a classroom visit. These should include key areas where there are identified gaps in the knowledge and skills of teachers in Turkey such as: observing whether teachers use a range of different types of assessment; if they regularly check that students have mastered the key content needed to progress to the next stage; and whether teachers provide feedback that is descriptive, constructive, timely and specific to support students in their learning. Principals might also be provided with guidance on how to undertake a classroom observation to ensure that they have the opportunity to observe these skills or practices (see Table 5.2).

Table 5.2. Suggested strategies for appraising assessment practices during classroom observations

Focus on the learners
Look for the teacher's impact on each learner and their progress. It is helpful to think in terms of cause (what the teacher does) and effect (what progress towards mastering the learning objective all learners make as a result).
Take opportunities to talk to learners
Ask questions that are relevant to their learning. For example, ask them to describe what they are doing and how they will know that they have achieved the learning or lesson objective well. Learners can provide us with lots of primary evidence including: ● how much progress they think they are making and how they know this ● how effectively the teacher delivers the course and helps them to understand what they need to do to improve further ● any problems they are facing and what support they receive from the teacher.
Look at work and displays on the walls
Take time to look around you to observe the learning environment. Are there any examples of assessed learner work on display? Does it help learners to know what to aim for and how they can get there?

Source: Adapted from Cambridge International Examinations (2015[18]), *Developing Your School with Cambridge: A Guide for School Leaders 2015*, http://www.cambridgeinternational.org/images/271302-developing-your-school-with-cambridge.pdf.

Ensure that appraisal includes evidence of learning progress

Evidence of student progress and outcomes is central to evaluating the effectiveness of classroom teaching (OECD, 2013[1]). Currently, when collecting evidence on learning as part of the appraisal process, interviews conducted by the OECD review team suggested that principals rely significantly on the grades that students receive in classroom assessments or national examinations, rather than on how teachers are helping to support learning in the classroom.

A narrow focus on achievement results risks creating the perception that it is high marks rather than progress overall which matters and might create incentives for teachers to inflate students' classroom assessment results, especially in appraisals that carry stakes for a teacher's career like for probation or promotion. It is also unfair for teachers since it is very difficult to capture an individual teacher's impact on learning outcomes through assessment results alone. Learning outcomes are influenced by a range of factors beyond an individual teacher's specific contributions, such as the student's ability, expectations, motivation, family support, the school context and prior learning (OECD, 2013[1]).

Instead, a fair appraisal system should draw on a broad range of evidence of progress in learning, not just end results. Strengthening the classroom observation component of appraisal would help in this regard. Another practical step would be to include examples of assessed student work over the year as part of a teacher portfolio. While Turkey reports that it currently uses teacher portfolios for teacher appraisal (OECD, 2015[4]), neither the teachers nor the principals that the OECD review team met with reported keeping or using portfolios for the purposes of appraisal. National guidance on the materials relating to student assessment that should be included in the teacher portfolio might include:

- Samples of marked student work.
- Lessons plans indicating assessment methods for all learning outcomes.

- Where required, lesson plans including modified assessments for some students to meet the learning needs of different groups of students in the class.
- Lesson plans which indicate when formative assessments will be used and indicating possible adjustments that will be made based on formative assessment information.

Such evidence can provide the basis for a conversation between a teacher and their evaluator where teachers may be encouraged to evaluate their assessment practices and identify areas for improvement. Teachers might be expected to set learning targets for their students, explaining how they will support students to reach these goals and the methods that they will use to assess their progress towards them. Principals can also use this conversation to ensure that a teacher's class-level targets support the school's overall learning targets. Undertaking reviews of teachers' portfolios is also important for probation and promotion appraisal. Here, external evaluations might ask teachers to select and discuss what they regard as examples of effective practice, and principals to provide their views of how a teacher's assessment literacy has evolved over time.

Reconsider how the written examination for probation appraisal is used

The use of a written examination as part of appraisal for probation might be reconsidered. In the short to medium term, Turkey might decide to retain the written examination because they can be useful to ensure that new teachers have basic knowledge and skills. But in order for the examination do this, Turkey should revise the content that is assessed since it currently duplicates content already assessed in the written examinations as part of initial teacher education (ERI, 2015[19]). Instead, Turkey might use this examination to require teachers to demonstrate how they would use their assessment skills in practice. For example, teachers might be required to explain how they would plan to assess learning in a given topic including how and when they would use formative assessment to check for understanding, and what kind of summative assessment they would use at the end of the topic and the rubric they would use. As a priority, Turkey should also revise how the written examination results for probation appraisal are used so that they are considered alongside the evaluations from school principals, supervisors and inspectors rather than having an eliminatory role for candidate teachers who have already demonstrated themselves to be competent in the classroom. In the future, as the quality of initial teacher education programmes improves, this written examination could be phased out.

Recommendation 5.1.3. Use appraisal results to develop teachers' assessment competency

A key objective of appraisal is to identify teachers' professional development needs. Ensuring that there is a strong link between performance appraisal and development opportunities is important to improve teaching practice (Ofsted, 2006[20]). Among 20 OECD education systems with regular appraisal of in-service teachers and available information, in over half of the systems (13) appraisal results inform teachers' professional development activities. However, in Turkey, regular appraisal does not inform professional development (OECD, 2015[4]). In order to inform professional development, appraisal needs to both provide feedback that helps teachers understand their strengths and learning needs and be linked to professional development opportunities that target these.

Ensure that appraisal provides teachers with useful feedback

Evidence from teacher surveys and the review team's interviews with teachers suggest that appraisals in Turkey could be adapted to better help teachers to understand their strengths and weaknesses. In 2008 – the last time Turkish teachers were last surveyed as part of the OECD Teaching and Learning International Survey (TALIS)[1] – over a third of Turkish teachers reported that appraisal and the feedback provided were not helpful for their development compared with a fifth of teachers on average across TALIS participating countries (OECD, 2009[21]). This finding was reflected in the review team's interviews with small groups of teachers who reported that nearly all in-service teachers receive top marks in their regular appraisals and that appraisal results do not provide them with much useful feedback or understanding of their assessment practice.

As part of the changes to regular appraisal, Turkey plans to introduce a self-assessment, where teachers will be required to identify their learning and development needs (see Box 3.1, Chapter 3). This should encourage teachers to engage more directly in their own professional development, which may promote greater uptake in development opportunities. In order to help Turkish teachers to accurately identify gaps in their skills it will be important that efforts are made to strengthen their understanding of the requirements of effective teaching and assessment, and in particular the changes to these expectations that were created by the curriculum changes in 2006 (see Chapter 3).

Teachers, and especially those at the beginning of their career, would benefit from more guidance and descriptive feedback as part of appraisal to help them to understand their strengths and learning needs. Evaluators can make feedback practical and accessible by demonstrating points with examples of a teacher's practice and by drawing on a teacher's portfolio. Turkey might consider providing pointers for evaluators on how to give this feedback in a constructive way, like providing dos and don'ts and tips on how to give feedback that is motivating, especially when delivering a message on underperformance.

Use professional development plans to link appraisal to professional development

Turkey already plans to introduce professional development plans for teachers as part of a new School-Based Professional Development Model, which is positive (see Box 3.1). Professional development plans involve principals working with teachers to develop individual plans that set out a teacher's learning needs and how they intend to address them through professional development over the coming year or longer (OECD, 2013[1]).

If this is to be a meaningful exercise, Turkey will need to provide training and significant guidance to principals on how to work with teachers to identify their professional development goals and develop strategies to achieve these. Research suggests that the following are important components of effective teacher development plans:

- Identifying specific actionable growth objectives that are tied to the classroom, with realistic timelines and practical examples of activities that can lead to change (Cole, 2012[22]).
- Drawing on a range of professional development opportunities, including both formal training courses provided nationally or regionally, and more informal collaborative types of professional development between teachers.
- During a teacher's regular appraisal, the following year they should be required to reflect on the professional development they have undertaken, its impact on their development and how far they have met the objectives that they set for themselves.

This information can also be used nationally to inform the development of professional development opportunities on assessment practice.

Making some professional development a requirement for teachers every year would also help to ensure teachers have sufficient time to devote to their professional learning (Chapter 3).

Policy issue 5.2. Revising school evaluation to support learning and effective assessment practices

School evaluation is currently undergoing a major change in Turkey. At the time of the OECD review, external school evaluations were on-hold and a new model for evaluation was being developed. This creates an opportunity for Turkey to revise parts of its evaluation system so that it is more effective in encouraging schools to develop the kinds of teaching and learning, including assessment, practices that will improve students' outcomes. This chapter provides an analysis of the existing arrangements for school inspection and school self-evaluation, making recommendations that can be addressed as part of the ongoing reforms.

First, the country will need to revisit the framework for external school evaluation – called school inspection in Turkey. It is important that the inspection framework is based on school outcomes that reflect the broad competencies for student learning emphasised by the curriculum. It is also important that the school-level processes in the framework encourage an evaluation of the quality of teaching and learning practices. A second issue that will help to strengthen the school evaluation system is to use school's self-evaluations to encourage schools to focus more centrally on the quality of teaching and learning, including assessment, and how to improve. Finally, self-evaluation needs to provide schools with greater scope to adapt and appropriate self-evaluation to reflect their individual context and priorities for improvement.

Recommendation 5.2.1. Ensure that the school inspection framework reinforces national objectives for learning and good assessment practices

At present, the indicators on learning outcomes and school-level processes for assessment in Turkey's inspection framework are not encouraging improvements in teaching and learning as well as they might. This is because the learning outcomes focus on "student success" in terms of high marks in national examinations and classroom assessments (see Box 5.3). This provides a summative judgement that does not capture progress in learning or the breadth of the learning competencies that the country's curriculum is based on. It is also because, while the inspection framework includes some aspects that are important for assessment – for example, assessments should be appropriate for students' learning and development level, and a variety of assessment types should be used – the focus is on ensuring that schools comply with a list of practices. This means that key aspects of how assessment is used in schools – the quality of assessment, how it is being used to support learning, in particular, the use of formative assessment, and what schools are doing to support improvements in assessment practice – do not receive sufficient attention.

Box 5.3. Indicators of student assessment in Turkey's framework for school inspection

School inspection in Turkey looks at both measures of student outcomes, called measures of "student success" and practices for student assessment. This includes the following indicators on student success:

- Results from central and local examinations, including Transition to Higher Education Examination – *Yükseköğretime Geçiş Sınavı* (YGS) and Undergraduate Placement Exam – *Lisans Yerleştirme Sınavı* (LYS) for upper secondary high school according to school type and environment characteristics.
- Academic achievement from Grade 4 onwards, including in written examinations, practical examinations, performance studies, projects and practical training in vocational education.
- Assessment of participation and results of national and international projects/competitions.
- Data on student participation, drop-out, repetition and higher educational participation.

And on student assessment practices:

- In Grades 1, 2 and 3, student assessment is conducted under the teacher's guidance in line with the assessment principles set out in the curriculum that indicates student achievement as very good, good and improved.
- For each subject, student assessment includes at least one project, either individual or group.
- In Grade 8, on any single day students do not take more than three examinations, and in the other grades, not more than two examinations.
- Examination questions are developed based on the learning expectations set out in the curriculum.
- Appropriate assessment and evaluation tools are used to measure student achievement.
- Teachers develop examinations that use different types of questions and cover different topics, and an appropriate answer key.
- For high school students, student assessment results are recorded in the e-School system.

Source: MoNE (2016[23]), *İlkokul / Ortaokul Rehberlik Ve Denetim Rehberi [Primary and Lower Secondary Guidance and Audit Guide]*, Ministry of National Education, Ankara.

Focus inspection indicators for learning outcomes on national learning standards

In many OECD countries, school evaluation focuses on recording and monitoring students' achievement of national learning standards as they are set out in the curriculum. This means that learning outcome indicators specifically reference learning in the school against national learning standards. In Turkey, the absence of such a standard for recording and monitoring learning outcomes creates a major gap for monitoring what students are

learning and the progress that they make because the information provided is not a meaningful indicator of the curriculum's expectations for learning. The inspection framework's focus on "student success" may also encourage teachers and schools to focus on recording high marks, rather than ensuring that students are fully mastering the curriculum's content. Turkey should use the national learning standards that this review recommends defining indicators on learning outcomes for school evaluation (see Chapter 2). This can be done very simply by explicitly referencing national learning standards. For example, the outcome indicator on learning outcomes in New Zealand's school evaluation framework specifies that: "students in primary education achieve success in relation to National Standards in mathematics, reading and writing" (Education Review Office, 2016[24]).

An important measure of school performance is how well it supports each of its students to progress, based on their individual starting points. This means that indicators on learning outcomes for school evaluation should include information on the progress that student cohorts make in terms of reaching national learning goals, and the progress that the school makes over time in terms of at least maintaining, or improving student outcomes, against national learning standards. For example, Scotland's school evaluation framework includes an indicator of "attainment over time", and an illustrative example of effective practice is provided: "learners make very good progress from their prior levels of attainment in literacy and numeracy", and "across all curriculum areas we [the school] have raised attainment continuously over time and/or maintained consistently high standards of attainment for all learners" (Education Scotland, 2015[25]).

When it revises the school inspection system, Turkey should include an outcome indicator based on national learning standards as well as an indicator of student progress over time. Once implemented, ABİDE will provide reliable and valid evidence for this indicator. The background information collected by ABİDE will also help inspectors develop a better understanding of how to evaluate schools' performance relative to their context, by providing national data on how schools in different contexts tend to perform.

Introduce expectations for learning outcomes in Grades 1 to 3

Following national reforms to end the use of summative, numerical marking in Grades 1 to 3, the school inspection framework does not explicitly reference that learning outcomes in these first years of primary should be looked at as part of inspections. However, outcomes in these early years should still play a role in school inspection in Turkey, as they do in other OECD countries that have enacted similar reforms to marking in the early grades. This will encourage teachers and schools to ensure that a range of assessments appropriate for students is used to monitor learning. The review team's interviews suggested that, in the absence of summative assessments linked to numerical marks, teachers currently make limited use of assessment because they lack understanding of more continuous, informal, formative assessments to monitor learning and support progress.

Include indicators on the quality of assessment practices

Current indicators in the school inspection framework focus predominantly on whether summative assessments are being undertaken (see Box 5.3). This focuses inspection on what the teacher does in a way that is disconnected from students and the interaction between teachers and students that is central to the learning process. Turkey should ensure that its new inspection framework includes indicators that focus on the quality of assessment practices across the school in the following areas:

- Looking for evidence that teachers are undertaking formative assessment. Teachers should be using assessment to help students understand their own learning processes, using information from assessment to adapt instruction to each student's learning needs and providing students with feedback that helps them to progress in the absence of summative, numerical marks. School inspection frameworks in a number of countries include process indicators dedicated to evidence of formative assessment (see Box 5.4).
- Ensuring that assessments are valid by reflecting the breadth of the curriculum's learning outcomes. For example, the evaluation framework might specify that there should be evidence that teachers are encouraged and supported to use a broader range of assessments (such as those specified in the curriculum).

Box 5.4. Formative assessment as part of school evaluation in New Zealand

New Zealand published a new version of its school evaluation indicators in 2016. The new indicators draw on the feedback and advice of academic experts, education leaders and teachers as well as case studies looking at how schools used evaluation and inquiry to improve outcomes for students. "Domain 4: Responsive curriculum, effective teaching and opportunity to learn" includes the following indicator on formative assessment:

Evaluation indicators	Effective practice
Assessment for learning Develops students' assessment and learning-to-learn capabilities	Teachers and students co-construct challenging but realistic learning goals and success criteria, developing shared understandings about the kind and quality of work required to achieve the desired outcome. Assessment activities are inclusive, authentic and fit-for-purpose; they provide meaningful evidence of achievement and progress and a basis for determining next steps. Students receive and give timely, specific, descriptive feedback in response to these questions: ● Where am I going? (What are my goals?) ● How am I going? (What progress is being made towards the goal?) ● Where to next? (What activities need to be undertaken next to make continuing or better progress?) ● How will I know when I've got there? Students identify their own learning needs and develop and use self-assessment skills to evaluate their own and others' work against clear criteria. Students provide feedback to teachers about the quality and effectiveness of teaching and learning. Teachers, parents and *whānau* actively participate in, and contribute to, students' learning journeys through ongoing, reciprocal communication.

Source: New Zealand Education Review Office (2016[26]), *School Evaluation Indicators: Effective Practice for Improvement and Learner Success*, http://www.ero.govt.nz/assets/Uploads/ERO-15968-School-Evaluation-Indicators-2016-v10lowres.pdf.

Classroom observations provide the opportunity to review many of the aspects related to the quality of assessment. While classroom observation is already part of school inspection in Turkey, inspectors will need more guidance in terms of what they should be looking for so that they can collect evidence on the quality of assessment practices, in particular, formative interaction, in line with the recommended revisions to the inspection framework. The guidance and rubrics developed for principals as part of teacher appraisal can be used

for this purpose (see Recommendation 5.1.2). The ministry might also develop guidance to help ensure that classroom observations for inspections are used to review assessment methods across a whole school (rather than focusing on evaluating individual teachers' assessment practices which should be the focus of teacher appraisal). For example, the English School Inspectorate, Ofsted, specifies that classroom observations for the purposes of school inspections are short and evaluators may spend just a few minutes in each classroom and try to visit a range of different classes and domains (Ofsted, 2017[27]).

Include indicators on school-wide strategies to support improved use of assessment

As well as looking at the use of assessment in classrooms across the school, inspectors should look for evidence of school-wide policies that are supporting teachers to use assessment more effectively. This would mean the inspection framework looking for evidence that:

- Teachers have a shared understanding of learning expectations, with dedicated strategies and activities to promote this like the moderation of student work.
- The school provides professional learning opportunities on assessment and creates opportunities for leaders and teachers to work together through collaborative inquiry and learning opportunities on assessment.
- Data on student learning and outcomes are used and analysed to identify improvements for teaching and learning practices, including the use of assessment, across the school. These activities might be led by school leadership as part of self-evaluation and objective setting, and as a collective exercise involving both the school leadership and teachers to create opportunities for peer learning.
- The school engages parents to inform them about the learning expectations for their children, their progress and how they can best support their child's learning and development.

Look for evidence of strategies to monitor and support students at risk of falling behind

Given the large share of students who do not develop basic proficiency in core competencies at school in Turkey (OECD, 2016[28]), inspectors should look for evidence of school-wide policies for monitoring those at risk of falling behind. Across OECD countries, important policy tools for tackling underachievement include clearly identifying struggling students and putting in place special support and help for those students (OECD, 2016[29]). Other countries, like the Netherlands, also use the school evaluation framework to collect evidence of additional support schools make available to students not reaching national learning standards (Dutch Education Inspectorate, 2017[30]). In Turkey, inspectors might look for the following types of evidence:

- Teachers regularly pause during lessons and use formative assessment to check for understanding before moving on.
- Teachers use assessment information to identify areas where students need to revisit certain content to fully consolidate learning.
- Feedback is provided in a way that is motivating and encouraging.

- Summative assessments are timed so that students only take them when they are likely to do well.

Inspection should also provide schools with feedback for improvement to encourage and support schools to make more systematic use of these kinds of practices.

Illustrate indicators with examples of effective practice

Examples of effective practice will make the framework for school inspection a more practical tool. They can help schools understand what they should be working towards achieving and encourage a consistent approach across evaluators. Many OECD countries already provide these kinds of examples in their frameworks, which can be short and simple. For example, Scotland (United Kingdom) provides the following example of effective assessment practice:

> *"Assessment is integral to our planning of learning and teaching. We use a variety of assessment approaches to allow learners to demonstrate their knowledge and understanding, skills, attributes and capabilities in different contexts across the curriculum. Our assessment evidence is valid and reliable. At key milestones, our assessments provide reliable evidence which we use to report on the progress of all children and young people. Across our learning community, we have shared expectations for standards to be achieved, and have robust arrangements for moderation across stages and across the curriculum." (Education Scotland, 2015[25])*

Provide schools with actionable recommendations

In order for inspections to drive school improvement, inspection reports should include detailed feedback and actionable recommendations. The ministry should develop a template so that inspectors are required to provide specific descriptions of areas of strength in the school, where improvement is needed and a "to-do list" of actions.

Recommendation 5.2.2. Use self-evaluation to focus schools on developing their assessment capacity

In a large and geographically diverse country like Turkey, raising learning standards nationally will depend to a large extent on each school developing its capacity to lead its own improvement. Self-evaluation can support this by providing a framework that guides schools to review how effectively they use teaching and learning, including assessment practices, to support national learning goals and develop strategies for improvement.

The systems for self-evaluation in Turkey could have a greater impact in helping schools to achieve this by ensuring that the indicators for self-evaluation (like those for school inspection), focus centrally on learning outcomes in terms of achievement of national learning standards and key aspects of assessment quality. While the Basic Institutional Standards system goes further than the framework for school inspection in terms of the latter, paying particular attention to how assessment is used to support learning, key aspects like using a range of different types of assessment and quality of formative feedback continue to be absent (see Box 5.5). Second, there are at least three different systems for self-evaluation – all schools undertake self-evaluations and submit data through the Education Quality Management System; primary and lower secondary schools are also required to undertake self-evaluations through the Basic Institutional Standards System; and vocational high schools have also had a separate self-evaluation system since 2014.

Rationalising these systems to create a single self-evaluation framework for all schools would help to create a coherent focus across all schools towards national goals. At the same time, schools will need more flexibility to be able to tailor self-evaluation to reflect their type of school, the local context, their students' needs and their development priorities.

Box 5.5. The Basic Institutional Standards System in Turkey

The Basic Institutional Standards System covers school-level activities in the three following areas: educational management, including strategic planning and management; learning and teaching processes; and support services, including the security, health, nutrition and cleaning practices at the school.

"Learning and teaching processes" includes a sub-standard on assessment and evaluation methods ensuring that assessments methods reflect their intended purpose, take into account the individual characteristics of the children, and that the results of assessment are used for to plan teaching and learning and support students' overall development. There are also sub-standards on how far the school makes plans that support each child's development and teachers' completion of professional development activities.

Source: MoNE (2016[9]), *Okul Öncesi Eğitim Ve İlköğretim Kurumlari Standartlari Kilavuz Kitabi [Pre-school Education and Primary Education Institutional Standards Guidance Book]*, Ministry of National Education, Ankara.

Create a single framework for self-evaluation based on core indicators in the inspection framework

Following the revisions to the framework for school inspection that this chapter recommends, the different existing systems for self-evaluation should be revised to create a single framework that adopts the same core indicators as the inspection framework. This will ensure that the current gaps across the self-evaluation frameworks, in terms of focusing on national learning goals and ensuring that assessment is used in a way that supports these goals, will be addressed. The core indicators that are used in both external and internal frameworks should reflect national priorities for assessment like ensuring that students make good progress against national learning standards, taking steps to ensure that assessments are valid and reliable, using assessment for learning and to engage students in their learning and that there are school-wide policies to ensure the availability of professional development opportunities to improve teachers' assessment literacy and analysis of assessment data.

Provide schools with space to add indicators

At the same time as adopting a single, national approach for self-evaluation, schools also need some space to be able to adapt self-evaluation so that they can appropriate it as a tool for their own improvement. In the majority of OECD countries, this is encouraged by developing self-evaluation systems at the school or local level (OECD, 2015[4]). In Turkey, the importance of ensuring a coherent and consistent focus on national learning objectives and the limitations of school, district and provincial capacity for school evaluation and improvement means that using a set of nationally-determined core indicators for both inspection and self-evaluation is the most feasible option at present.

However, schools could be provided with the opportunity to add to the core indicators, through new indicators that reflect their own school context and priorities. For example, schools in the less developed eastern provinces where drop-out is higher might include specific indicators on how teachers use assessment and feedback to motivate students and to help students understand their strengths and which kinds of future educational pathways might best reflect these. This will also mean that different types of schools can adapt self-evaluation to their own needs and context, rather than having entirely separate self-evaluation systems as exist at present.

Use "challenge" questions to encourage critical inquiry

When the new single framework for self-evaluation is developed, it should be used to frame indicators in a way that encourages schools to reflect on their practices. At present, the indicators in the self-evaluation frameworks encourage schools to comply with indicators, for example, the Basic Institutional Standards system requires schools to report on whether a standard is present in the school, and how functional, effective and useful it is in a tick-box form. However, research on the use of indicators to improve practice in schools highlights the importance of stimulating cultures of inquiry and encouraging deep and challenging conversations about practice (Earl, 2014[31]). If the indicators in Turkey are to do this, they will need to be framed in a way that prompts schools to engage in a discussion about how well they are supporting all students to make progress in their learning, the quality of the assessment practices undertaken in the school and what aspects can be improved. In other OECD countries, school evaluation frameworks often include specific questions to encourage schools to ask themselves these kinds of questions. For example, Scotland's School Evaluation Framework (Education Scotland, 2015[25]) includes suggested "Challenging Questions" on assessment practice:

- How well do we apply the principles of planning, observation, assessment, recording and reporting as an integral feature of learning and teaching?
- How well do we make use of a range of valid, reliable and relevant assessment tools and approaches to support the improvement of children and young people's learning?
- How well do we record, analyse and use assessment information to identify development needs for individual learners and specific groups?
- How effectively do we involve learners and parents in planning and evaluating learning?
- How well do we enable all children and young people to engage in self- and peer assessment to improve their learning? How do we know this benefits learning?

Use inspections to build schools' capacity for improving their use of assessment

Schools in Turkey will need to be supported to move towards a less compliance-focused model of self-evaluation. One way to do this is by using school inspectors to review school's self-evaluation practices. Self-evaluation in Turkey is more or less separate from school inspection but is a component of external school evaluation in the vast majority of OECD countries. As a minimum in most of these countries, self-evaluation results are shared with external evaluation bodies. In Scotland, where school self-evaluation is central to the school evaluation approach, a school's self-evaluation, its effectiveness and planning for improvement are evaluated as part of the external evaluation process to support school

improvement (OECD, 2013[1]). Turkey should use the new framework for inspection to explicitly review schools' self-evaluation processes.

In terms of assessment practice, when reviewing schools' self-evaluation reports and improvement plans as part of inspections, inspectors should look for evidence of:

- How schools have used student assessment results, as well as appraisal and school evaluations to identify their development needs in terms of the use assessment.
- That schools have identified specific goals in how they use assessment and actions to achieve them. For example, an important goal for most schools in Turkey will be reducing the number of summative tests that teachers use. This will need to be supported by a school-wide strategy like encouraging teachers to participate in professional development external to the school and providing some opportunities for collaborative discussion and feedback from experienced teachers within the school so that teachers can practice using different types of assessment.

Strong leadership also has an important role in ensuring effective self-evaluations (OECD, 2013[1]). Turkey should consider how it can help its principals, who currently occupy a primarily administrative role, to develop the capacity to lead self-evaluation. This might include training on how to lead self-evaluations effectively. In the future, principal appraisal might also be adapted to review how effectively principals lead self-evaluations and give feedback for improvement. In Ontario (Canada) for example, principal appraisal includes indicators related to how self-evaluation is led by the principal (OECD, 2013[1]).

Policy issue 5.3. Using system evaluation to help improve teaching, learning and assessment practices

System evaluation draws on information from across the education system to monitor progress against national goals and identify where improvements can be made. Countries use a combination of qualitative and quantitative information about what is happening across their education systems for this purpose, such as data on students, teachers and schools, and information on school quality and student achievement. Over the past decade, Turkey has focused on expanding the information that is collected and reported. The ministry's Information System (MEBBIS) now provides extensive data on school inputs and conditions, and the e-School Management Information System enables continuous monitoring of children's school attendance to help reduce drop-out (UNICEF, 2012[32]).

The focus for system evaluation should now shift towards making greater use of the information that is collected to drive school improvement. This will require greater analysis of information to see what it reveals in terms of the teaching and learning challenges in Turkey's classrooms and using these insights to direct support back to schools. One remaining but critical gap for system evaluation also needs to be addressed. In the absence of other data sources, the national Strategic Plan (like school evaluation) focuses on test marks from classroom assessments to monitor learning outcomes and quality. This review provides recommendations on how information from the new national assessment – *ABİDE* – and potentially the new Student Learning Achievement Monitoring Assessment, the Turkish Language Skills Study and Common Examinations[2] – when developed, can provide more valid and reliable data for monitoring learning outcomes.

Recommendation 5.3.1. Ensure that targets for education support national priorities

The current Strategic Plan makes it a priority to improve the quality of teaching and learning, with the goal of raising student achievement. The latter is measured by students' end of year marks from classroom assessments averaged across all subjects and all students in Grades 5 to 12, with the goal of increasing the average for each grade to 80 out of 100 by 2021 (MoNE, 2015[10]). This provides a clear target which gives national prominence to the importance of student outcomes and what happens in the classroom. However, as discussed throughout this report, the measure is unreliable – teachers' classroom marks differ to some extent across classrooms and schools in all countries and ensuring reliability in Turkey will require significant investments, through initial teacher education, professional development, moderation and national learning standards as this report recommends. Classroom test scores are also not a valid measure of the competencies valued in the national curriculum, because as national research and the review team's interviews illustrate, many teachers in Turkey do not have a strong understanding of how to assess the broad competencies in the national curriculum. Finally, focusing on test scores also reinforces teachers' and society's perceptions that it is summative marks that matter, undermining national efforts to limit teachers' use of summative testing and promote the use of a wider range of assessments, including formative, to better support student learning.

Set goals that aim to raise performance

Turkey should set targets for learning that focus on demonstrating progress against the learning standards that this review recommends the country develops (see Chapter 2). This will mean using assessment data that is valid and reliable for the national monitoring of learning outcomes. Creating prominent national goals for learning (rather than high test marks) will also help to galvanise change in teaching and learning by focusing education actors and society on the competencies that children and young adults are expected to develop at school. This might include:

- Setting long-term goals for improvement against international benchmarks. A goal over the next three cycles of the OECD Programme for International Student Assessment (PISA) or by 2030 might be to reduce the share of 15-year-olds students who do not develop basic competencies, i.e. Level 2 or lower in the PISA framework. The European Union has a similar target – that less than 15% of 15-year-olds in Europe have low basic skills by 2020 (European Commission, 2018[33]).
- Using data from the new national assessments – in particular *ABİDE* – to set goals and monitor progress in the next strategic plan. Goals might focus on increasing the share of students in primary and lower secondary education who meet national standards over the duration of the strategic plan. This can be complemented by data at the end of compulsory education from the *Temel Yeterlilik Testi* - Basic Proficiency Test (TYT) national examination.

These goals and progress can be made visible through a website that communicates national targets and progress in clear, accessible terms. For example, New Zealand reports the share of students at or above National Standards for reading, writing and mathematics in primary nationally on an annual basis, as part of a visual one-page document that sets out progress in key education measures (Ministry of Education, 2016[34]). This would complement the information campaign that this review suggests Turkey might develop to educate parents

and society on the importance of competency development for life and work (see Chapter 2).

Provide the public with a more comprehensive picture of school performance

At present, the only information that students and parents have about schools are examination results and their own perceptions of their prestige. Turkey should identify other kinds of qualitative information that it could make available to help students and parents identify schools with the teaching and learning environments that are best suited to their individual needs in the context of recent change to high school placement. In Turkey, schools are required to share their self-evaluation reports with parents and students in the form of a letter or report, which risks making self-evaluation a high-stakes exercise for schools. Instead, Turkey should consider making *summaries* of the self-evaluation reports publicly available (OECD, 2015[4]). The country could also consider making school inspection reports publicly available, as they are in 16 OECD countries (OECD, 2015[4]). As the latter provide an external perspective on school quality, they would be particularly valuable for students and parents in Turkey given the limited availability of public assessment information. Additional steps to improve the value and accessibility of external and internal school evaluation reports include:

- Using templates to ensure that reports are structured and written in a way that is accessible for students and parents.
- Highlighting information about teaching and learning that are of particular interest for parents and students. For example, inspection reports might provide a qualitative judgement on the quality of the teaching and learning in the school and the progress that students make, while omitting any assessment data from the report that is made publicly available.

Recommendation 5.3.2. Help schools use evaluation information for improvement

Through the system of school evaluation and centralised electronic systems like MEBBIS and e-School, schools in Turkey report lots of information to provinces and the ministry. Greater analysis of this information by the ministry and provinces would help to identify and understand more deeply the common challenges that schools face in improving teaching and learning. This analysis could then be used to target central support to where it is most needed and help schools to develop more effective improvement strategies.

Undertake more central analysis to inform policy

As a first step, the ministry can undertake much more analysis of assessment data from examinations and in the future from national assessments (ABİDE, the Student Learning Achievement Monitoring Assessment and the Turkish Language Skills Study), to identify which groups of students are vulnerable to low performance. This would be complemented by greater analysis of information from school evaluations, and the background questionnaires from the national assessments to identify the contextual factors, including school-level factors like teaching and assessment practices, that are associated with lower performance. The information can be used to inform national planning and policies as well as being shared with the provinces to help them examine further and address the challenges that their schools face locally.

Since 2018, the ministry has begun publishing Education and Evaluation Reports, which examine the VET and general education sectors, with the aim of supporting data-based policy making and greater transparency in the system ((MoNE, 2018[35]), (MoNE, 2018[7]), (MoNE, 2018[36]), (MoNE, 2019[37]), (MoNE, 2019[38])).

Encourage provinces to undertake more analysis to understand the challenges for schools in their region

In the majority of provinces, information from schools does not seem to be fully exploited to help understand the challenges schools face, and where improvements can be made. An exception is the Provincial Directorate of Ankara, which reported to the review team how it analyses Temel Öğretimden Ortaöğretime Geçiş Sistemi – Transition from Elementary Schools to Secondary Schools Exam (TEOG) and university placement examination results from the province's schools to identify those which are successful in raising learning outcomes. The insights are used to provide guidance and advice for other schools and encourage good practice sharing. The ministry might encourage more provinces to undertake this kind of activity, perhaps asking the new assessment centres to work with provincial staff to develop templates and data analysis skills to make more use of schools' assessment data and identify priorities for improvement. The ministry can also encourage other provinces to make greater use of evaluation information by providing public recognition for provinces like Ankara to encourage good practice sharing across provinces.

Another simple measure that all provinces could be encouraged to undertake, as part of their existing quality review processes of school improvement plans, is to publicly recognise local schools. This should focus on recognising those schools that develop effective and innovative processes to improve teaching and learning, rather than just schools with good results. For example, this would include schools that are improving, reflected in a declining share of students who do not meet minimum national standards according to *ABİDE* data. It could also include schools that are employing innovative strategies in areas important nationally, like using peer assessment to create a positive learning environment, or projects to effectively integrate 21st century competencies into instruction and assessment. Recognition should focus on providing ways for these schools to share their strategies with others and avoid an unhelpful focus on using results for accountability purposes. Inspectors could also contribute to this process, by highlighting those schools that their inspections find are using self-evaluation and improvement plans well to develop specific and effective actions to better support learning.

Develop principals' capacity to act thoughtfully on evaluation information

The ministry and provinces can help schools by undertaking greater analysis of evaluation information but school principals have a central role to play so that this information is used to identify schools' development needs and put in place strategies for improvement. In order to do this, principals need a strong pedagogical background, including in assessment. They also need to be able to exert strong leadership to be able to bring all school actors on board with improvement strategies. This will be particularly important in Turkey where teachers and parents accustomed to regular summative testing will need to be convinced of the merits of moving towards a new approach that promotes more formative assessment and descriptive feedback.

Principals in Turkey currently have a primarily administrative role and the review team's discussions with some principals indicated that they do not believe that it is their role to engage with teachers' assessment practices. Encouraging principals to take on greater

leadership of assessment will require a major transformation of their current role. Sharing assessment roles across the school would provide principals with valuable support as they develop their roles as pedagogical leaders and enable them to draw on the knowledge and skills of experienced teachers. It will also help to ensure that the whole school community is involved in and takes responsibility for improving assessment practices. Sharing responsibilities across the school also helps school leaders to manage their increasingly complex role (Schleicher, 2012[39]).

Provide targeted support to schools in greatest need

The local context and school environment of some schools in Turkey mean that they face a range of risk factors for low performance and will require more support to improve learning outcomes. This includes schools in the less developed eastern provinces and rural areas where there is a concentration of students with high levels of socio-economic disadvantage and the least experienced teachers. It also includes the dense urban areas where double-shift classes are common at present, leaving teachers with little time and space to provide individualised feedback or differentiate learning to meet a wide range of learning needs.

Evidence from OECD countries suggests that policy makers can help tackle low performance in these kinds of schools by directing additional, tailored resources to support them (OECD, 2016[29]). In France, for example, a major reform of "*l'éducation prioritaire*" in 2017 for schools in the country's most deprived areas focuses on integrating into daily routines the kinds of classroom and school-wide practices that have been found to be particularly effective in improving learning outcomes. These practices are set out in a guide for teachers and schools, which highlight key interventions such as quality teacher feedback on learning; changes to reporting that make specific what a student has achieved and where improvement is needed; regular use of diagnostic assessment; and close monitoring of students at-risk of falling behind and/or dropping out. Schools in these areas receive more support and resources to enable them to employ these approaches, like support to reduce class sizes in the first two years of primary by half; training and mentorship for teachers so that they can better adapt teaching to learner needs; and more flexibility in teachers' time so that they can work together to identify effective strategies to help individual students (Ministère de l'Éducation Nationale, 2017[40]).

In Turkey, areas that face the greatest socio-economic challenges could be supported by a similar programme of enhanced support. Measures might include:

- Making them a priority for the implementation of national reforms like ending double-shift schools and reducing large class sizes.
- Establishing the new assessment centres in these areas first, because schools in the less developed eastern regions tend to have fewer experienced teachers.
- Giving teachers more time specifically dedicated to working in school-level groups focused on identifying and monitoring students at-risk for falling behind and dropping out.
- Making the diagnostic assessments recommended in this report mandatory at the beginning of each year.

Conclusion

Creating an evaluation system in Turkey that better promotes learning and good assessment practices will take time but the country already has solid foundations to build on. These include strong traditions of teacher appraisal, school evaluation and system planning and monitoring. It also includes a society that cares deeply about education, both for the success of its young people and for national competitiveness. Turkey now needs to better orient the evaluation system and society in general towards broader learning goals and more effective use of assessment.

Table 5.3. Policy recommendations

Policy issues	Recommendations	Actions
5.1. Using appraisal to encourage and support teachers to employ good assessment practices	5.1.1. Ensure that appraisal reflects the breadth and depth of assessment competency important for learning	● Ensure that appraisal is coherent with national learning goals ● Develop appraisal criteria that cover key competencies for assessment Illustrate assessment competencies with examples of effective practice ● Develop specific levels of assessment competency for different stages in the teacher career path ● Focus on quality when evaluating assessment practices ● Use authentic evidence of classroom practice to identify underperformance
	5.1.2. Ensure that evaluators focus on authentic measures of teachers' assessment practice	● Provide more guidance for evaluating assessment practices during classroom observation ● Ensure that appraisal includes evidence of learning progress ● Reconsider how the written examination for probation appraisal is used
	5.1.3. Use appraisal results to develop teachers' assessment competency	● Ensure that appraisal provides teachers with useful feedback ● Use professional development plans to link appraisal to professional development
5.2. Revising school evaluation to support learning and effective assessment practices	5.2.1. Ensure that the school inspection framework reinforces national objectives for learning and good assessment practices	● Focus inspection indicators for learning outcomes on national learning standards ● Introduce expectations for learning outcomes in Grades 1 to 3 ● Include indicators on the quality of assessment practices ● Include indicators on school-wide strategies for improved use of assessment ● Look for evidence of strategies to monitor and support students at risk of falling behind ● Illustrate indicators with examples of effective practice ● Provide schools with actionable recommendations
	5.2.2. Use self-evaluation to focus schools on developing their assessment capacity	● Create a single framework for self-evaluation based on core indicators in the inspection framework ● Provide schools with space to add indicators ● Use "challenge" questions to encourage critical inquiry ● Use inspections to build schools' capacity for improving their use of assessment
5.3. Using system evaluation to help improve teaching, learning and assessment practices	5.3.1. Ensure that targets for education support national priorities	● Set goals that aim to raise performance ● Provide the public with a more comprehensive picture of school performance
	5.3.2. Help schools use evaluation information for improvement	● Undertake more central analysis to inform policy ● Encourage provinces to undertake more analysis to understand the challenges for schools in their region ● Develop principals' capacity to act thoughtfully on evaluation information ● Provide targeted support to schools in greatest need

Notes

[1] Turkey is also participating in TALIS 2018. The results, that will be published in 2019, were not available at the time of drafting this review.

[2] The Student Learning Achievement Monitoring assessment was introduced under the Ministry of National Education's 2023 Education Vision. It is intended to provide schools with diagnostic information on students' strengths and weaknesses in Turkish, mathematics and science. As of mid-2019, some 300.000 students in grades 4, 7 and 10 have participated in the assessment. The Turkish Language Skills Study assesses the competencies of students in four areas: listening, reading, writing and speaking. It has so far been conducted in 15 provinces prior to the nationwide placement exams, providing students with feedback on their Turkish language proficiency and suggestions on areas where they need to improve. The Common Examinations initiative refers to newly introduced joint examinations conducted at the provincial level. The purpose is to provide large-scale, comparable data on student performance as well as information for students themselves to better understand their proficiency gaps. The Ministry of National Education expects that the results obtained from these initiatives will be examined at the school level and used to inform the design of weekend courses to help students address areas of weakness. These initiatives were introduced after the analysis for this review was completed and are therefore not addressed in this report.

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