Teaching as a knowledge profession

Modern teachers are expected to develop students’ 21st century skills in increasingly diverse and digitalised classrooms, informed by new research on teaching and learning. To do this, teachers must update teaching methods and employ innovative teaching practices and mobilise multiple sources of evidence. This continuous renewal of teachers’ professional knowledge is critical to their professionalisation.

The ambition is great: to continue to improve student outcomes, the quality of teaching must also be enhanced. Understanding how to do this means exploring what has hitherto been referred to as the “black box” in teaching: teachers’ professionalism and their knowledge base.

The Teacher Knowledge Survey (TKS) assessment module will be an optional component of the Teaching and Learning International Survey (TALIS) 2024.

Value for countries

The Teacher Knowledge Survey assessment module will provide information on:

- whether teachers are prepared with the knowledge and skills for 21st century teaching, in particular, for using technology to enhance learning, teaching diverse classrooms and for using modern pedagogical approaches
- the strengths and weaknesses of teachers’ current pedagogical knowledge base.

Results can be used to:

- improve initial teacher education, teacher induction and continuing professional development to ensure a robust knowledge base in the profession in line with national policy priorities
- support policies in attracting and retaining a high-quality teaching workforce
- empower the teaching profession to take charge of its knowledge base.

Approach

The Teacher Knowledge Survey assessment module generates pedagogical “knowledge profiles” that paint a picture of the relative strengths of the knowledge base of the teaching profession in each country/system (Figure 1).

This optional assessment module will be administered to lower-secondary teachers participating in TALIS 2024. In addition to the TALIS core questionnaire, participants complete:

- an assessment of general pedagogical knowledge on key dimensions such as instructional processes, learning processes and assessment
- a questionnaire on the content and quality of opportunities to learn in initial teacher education and professional development.

The results of the assessment module will also be analysed in relation to key constructs on teacher professionalism in the TALIS main questionnaire such as teachers’ affective and motivational characteristics (e.g. self efficacy, career values) and self-reported teaching practices.

The purpose of the instrument is to map system-level knowledge profiles, and interpret them in line with the national contexts and priorities, rather than in a normative way.

Figure 1. Knowledge profile

This knowledge profile exhibits a relative strength in Assessment.
Examples of key policy questions addressed by the module

What matters for high quality instruction and teacher retention?

The joint analysis of the Teacher Knowledge Survey assessment module and the TALIS main questionnaire allows us to better understand the role teacher knowledge plays in the quality of instruction.

For example, data can reveal that high levels of knowledge with equally high levels of self-efficacy are linked to higher quality instruction. It can also indicate what kind of profiles are associated with stronger intent to persist in the profession, thus giving valuable information for where support and incentives are needed.

What are quality features of teacher education and how can they be improved?

The Teacher Knowledge Survey assessment module allows for identifying strengths and weaknesses in the content and quality of professional development and initial teacher education programmes.

For example, data can reveal how teachers’ knowledge relates to different features of professional learning, e.g. pedagogical content elements, active learning, feedback.

If a country opts for sampling novice teachers, the module can give insight into the content and quality of induction programmes and early career support mechanisms.

Preliminary timeline for TALIS 2024

The final timeline will be determined in the second half of 2020.

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Participate / Join us

Recruitment of countries/systems has now begun. Contact EDUITEL@oecd.org to express your interest, or request a phone call or virtual meeting with the team to support your decision-making.
Frequently Asked Questions

What are the target populations and how can participating countries ensure appropriate sample sizes?

The Teacher Knowledge Survey assessment module can be administered to:

- the core TALIS sample of ISCED-2 teachers
- the optional TALIS sample of novice teachers (ISCED 2 level): for countries participating in the TALIS novice-teacher module.

Countries will receive support to develop strategies to ensure good sample sizes drawing on the experience of other surveys. The sampling criteria for novice teachers will take country contexts into account to the extent possible in order to ensure a sufficient number of respondents.

What is the added value of sampling novice teachers within the TKS assessment module?

Teachers in their early career face particular challenges. These include consolidating their knowledge base, negotiating this knowledge, and the views and practices derived from more experienced colleagues, adapting to the specific school context and culture, as well as managing conflicts between personal perceptions and public expectations (Paniaguai and Sánchez-Martí, 2018[4]). Extending the TKS module to the novice teacher sample can give insight into the evolution of teachers’ knowledge throughout their career. It can also reveal factors that matter for successfully coping with early career challenges, and can contribute to decreasing teacher attrition during this fragile period.

Why does the Teacher Knowledge Survey assessment module focus on general pedagogical knowledge?

Teachers’ specialised knowledge encompasses a range of fields and types of knowledge. The module focuses on general pedagogical knowledge, which is the specialised knowledge of teachers in creating and facilitating effective teaching and learning environments for all students, independent of subject matter. Results from a recently published systematic review suggest that general pedagogical knowledge relates to teaching quality and student learning, and, thus, is a crucial prerequisite and resource for high-quality and effective teaching (Ulferts, 2019[5]). There is substantial scientific insight on subject-specific knowledge of teachers such as content knowledge and pedagogical content knowledge, however, evidence on how to foster general pedagogical knowledge is scarcer (Guerriero, 2017[1]; Baumert et al., 2010[2]; Voss, Kunter and Baumert, 2011[3]). The Teacher Knowledge Survey assessment module will help fill this evidence gap.

How can the Teacher Knowledge Survey assessment module capture the complexity of professional knowledge required for teaching?

The Teacher Knowledge Survey assessment module captures teachers’ knowledge in key domains such as instruction, learning and assessment. The assessment instrument will map teachers’ knowledge to teach diverse classrooms, use digital skills and develop 21st century skills such as critical thinking and collaboration across the main domains. It will take account of theoretical/scientific knowledge (i.e. formal knowledge of concepts and theories) as well as practice-based knowledge (i.e. the ability to apply professional judgement in a given classroom situation).

Participating countries are free to develop and include additional elements as national options, such as pedagogical content knowledge or content knowledge to provide a more comprehensive picture. Including additional components is at the expense of the countries and must align with the implementation timeline of TALIS 2024.

Does the TKS assess individual teachers and schools?

The Teacher Knowledge Survey assessment module will provide an objective measure of teachers’ knowledge in order to map system-level knowledge profiles rather than assess individual teachers or schools. Knowledge profiles will be interpreted taking the national contexts into account and in line with national priorities, rather than in a normative way. While schools can use the results of the module to reflect on how to improve professional learning among their teachers, just as with the core TALIS survey, the assessment is not designed to deliver...
school-level results for school improvement and benchmarking purposes. This is necessary to preserve the anonymity of data from participating teachers. Providing school-level results would require substantial adjustments to the current TALIS survey design.

**Is this a normative assessment of knowledge?**

The assessment module provides an objective measure of teachers’ knowledge of the current evidence base in pedagogical and learning sciences. This includes knowledge of concepts, frameworks, theories, as well as their application in teaching.

The module will use assessment approaches that allow for mapping the spectrum of options for teaching in the classroom. While multiple choice items that necessitate one correct answer that is clearly justifiable based on research evidence can be suited to assess theoretical/scientific knowledge, an extended scale range is more appropriate for measuring practice-based knowledge. For these types of items, teachers will judge teaching approaches on a scale range (e.g. from more to less effective, less to more suitable) rather than simply on a binary scale (right or wrong). In addition, drawing on recent research developments, new scoring methods can be used for such situation-based items. This involves using likert-scales (e.g. for judging the effectiveness of certain teaching approaches, etc.) and comparing respondents’ answers to answers of a designated board of experts.

**How can we bring the profession on board with an assessment of knowledge?**

The module is designed to help empower the profession to take charge of its knowledge base. Successful implementation requires that the teaching profession as a whole is on board with a knowledge assessment, that teachers are comfortable with participating and feel that this data can contribute to the social value of their profession. For this to happen, clear communication strategies and inclusive policy design are critical. Countries might want to consider the following:

- Increasing public awareness for the complexity of the knowledge required for teaching.
- Giving a voice to teachers in designing national and regional policies as well as decisions in schools and teacher education institutes.
- Facilitating a collective reflection across countries and communities about shared knowledge and ways to empower the profession.
- Using the TKS assessment module as an inclusive system-level reflection tool to help empower actors to engage in a collective endeavour to improve teaching quality.

Countries may wish to establish national teams to implement the study that includes teachers and teacher educators. For example, universities / teacher education institutions can be well placed to co-ordinate study implementation, participate in data analyses and interpretation at the national level. This can enable them to induce change at the institutional level, as well as propose policy recommendations for the national level. Similarly, teachers can be involved in review processes, study implementation and the interpretation of the results.

Find a brochure for the teaching profession [here](#).

**How long will the module take? How can it provide a comprehensive and valid picture of the knowledge base within feasible survey time?**

The TKS assessment module is designed to take 30 minutes to complete. The module design will exploit the opportunities provided by modern assessment approaches such as incomplete block design and multidimensional adaptive testing to reduce the testing time for individual teachers and still cover a range of topics from different areas in a reliable, valid and comparable way. To optimise the length of the module, synergies between key contextual factors (opportunities to learn, motivational and affective competencies and teaching practices) and the TALIS main survey will be exploited to the extent possible.
How much does the Teacher Knowledge Survey assessment module cost?

The final costs will be determined based on the bids the Secretariat receives for the Call for Tender. An initial cost estimate is expected to be available for countries by autumn 2020. The final costs will depend on the number of countries participating.

REFERENCES


