FRAMEWORK FOR THE DEVELOPMENT OF OECD EDUCATION INDICATORS

Introduction

1. This document describes the organising framework for the current programme of work for the OECD education indicators programme (INES), including activities related to the OECD Programme for International Student Assessment (PISA).

2. To facilitate a systematic and coherent approach to the organisation and prioritisation of objectives and activities, the programme of work is organised by two dimensions:

- the **level of the education system** to which the resulting indicators relate; and
- whether the activities relate to measuring **outcomes or outputs** of education and learning, to **policy-amenable determinants of these outcomes or outputs**, or to **given constraints** at the respective level of the education system.

3. Each cell in the matrix formed by these two dimensions forms a **Work Area** and is described by the ***outputs*** that are sought and which are grouped according to whether they contribute to conceptual work; data development; or analysis and reporting. As appropriate, this description also indicates the policy aspects to which the outputs relate, with three main categories distinguishing between indicators and analyses relating to the quality of educational provision and outcomes; indicators on equity in educational opportunities; and indicators on the adequacy and effectiveness of resource management.

Levels of the education system

4. The framework considers four **levels of the education system** that relate, on the one hand, to the entities from which information is sought and, on the other hand, to the level of the education system to which the resultant policy messages relate. The four levels are:

- **System Level A**: The individual participants in learning activities, from children in early childhood education and care, through youths in primary and secondary schools, to adult learners in tertiary institutions, the workplace or other settings.
- **System Level B**: The instructional delivery within educational institutions, the work-place or other formal or informal settings.
- **System Level C:** The educational service providers and institutions that provide instructional services to individuals or education-related services to individuals and other educational institutions.
- **System Level D**: The education system seen in its entirety.

5. A differentiation between the four system levels is not only important with regard to the collection of information, but also because many features of the education system play out quite differently at different levels of the system[1].

Domains

6. The second dimension in the organising framework groups the programme of work at each of the above levels (i.e. the individual, institutional or system level) further:

- **Domain 1**: The development of indicators on observed outputs of education systems and the impact of competencies for individuals, societies and economies, are grouped under the sub-heading *output and outcomes of education and learning.*

- **Domain 2**: The sub-heading *policy levers and contexts* groups activities seeking information on the policy levers or circumstances that shape the outputs and outcomes at each level.

- **Domain 3:** These policy levers and contexts typically have *antecedents* – factors that define or constrain policy. The sub-heading *antecedents and constraints* represents these. It should be noted that the antecedents or constraints are usually specific for a given level of the education system and that antecedents at a lower level of the system may well be policy levers at a higher level (e.g. for students in a school teacher qualifications are a given constraint while, at the level of the education system, professional development of teachers is a key policy lever).

- **Domain 4**: Management and support activities that are not accounted for in the other domains.

7. The four system levels and the three domains can be summarised in a two-dimensional matrix as indicated in Figure 1.

Figure 1

		Domain 1	Domain 2	Domain 3	Domain 4
		The outputs and outcomes of learning	**The policy levers that shape outcomes**	**The antecedents that contextualise or constrain policy**	
System Level A	**Individual learners**	**Work Area 1.A** Quality and distribution of competencies	**Work Area 2.A** e.g., individual attitudes, engagement and behaviour	**Work Area 3.A** Background of the learners	
System Level B	**Instructional settings**	**Work Area 1.B** Quality of instructional delivery	**Work Area 2.B** e.g., teaching and learning practices and classroom climate	**Work Area 3.B** e.g., student learning conditions and teacher working conditions	**Management, co-ordination and production work not allocated to the preceding columns**
System Level C	**Education service providers**	**Work Area 1.C** Output of institutions and quality of institutional performance	**Work Area 2.C** The learning environment at school	**Work Area 3.C** e.g., community and school characteristics	
System Level D	**Country or system**	**Work Area 1.D** Overall outcomes of education and impact on personal, social and economic well-being	**Work Area 2.D** System-wide structures, resources and policies	**Work Area 3.D** National educational, social and economic context	

[1] For example, at the level of the students within a classroom, the relationship between student achievement and class size may be negative, if students in small classes benefit from improved contact with teachers. At the class or school level, however, students are often intentionally grouped such that weaker or disadvantaged students are placed in smaller classes so that they receive more individual attention. At the school level, therefore, the observed relationship between class size and student achievement is often positive (suggesting that students in larger classes perform better than students in smaller classes). At higher aggregated levels of education systems, the relationship between student achievement and class size is further confounded, e.g., by the socio-economic intake of schools or by factors relating to the learning culture in different countries. Past analyses, which have relied on macro-level data alone, have therefore sometimes led to misleading conclusions.