Network on Early Childhood Education and Care

IMPLEMENTING ISCED 2011 AND PRIORITY INDICATORS DEVELOPMENT

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DATA DEVELOPMENT AND POLICIES FOR ECEC - IMPLEMENTING ISCED 2011, INPUT TO THE INES WORKING PARTY

Purpose

1. The INES Working Party in the OECD is the group responsible for developing and reporting indicators of education systems for its member countries. These are used in a variety of contexts, notably the annual publication of Education at a Glance (EAG).

2. The Working Party will shortly implement the new ISCED 2011 standard for definition of Early Childhood Education. This paper has two related purposes.

3. The first is to form a statement of position from the ECEC network, as policy ‘owners’ of this area, to the INES Working Party, as the network with responsibility for data development. It discusses priorities for implementation of ISCED 2011, and contributes to the discussion agreed to by the last meeting of the INES Working Party to explore the boundary between ‘education’ and ‘care’ programmes further.

4. The second is to present more immediate priorities for development of new indicators within the ISCED 2011 framework. These will be added to the paper following discussion of a separate paper on more specific indicator priorities.

5. This paper, with any amendments agreed by the next ECEC network meeting, will then be forwarded to the INES Working Party.

Current State

6. Education at a Glance contains three key indicators (enrolment, expenditure and quality in terms of adult-child ratios and teacher wages and qualifications). They have historically been reported according to ISCED 0, the standard definition of pre-primary education. Currently EAG uses the ISCED 97 standard, and is planning to transition to ISCED 11 for EAG 2014 data collection to be published in 2015 (data will be reported in UOE 2014). ISCED 97 defines what is included in these indicators as follows.

7. Programmes at level 0, (pre-primary) defined as the initial stage of organized instruction are designed primarily to introduce very young children to a school-type environment. The distinction between programmes that are classified as ISCED 0 and programmes that are outside of the scope of ISCED 0 is
based primarily on the *educational properties* of the programme. As the educational properties of these programmes are difficult to assess directly, several proxy measures are used. ISCED 0 programmes:

Include early childhood programmes that

- are in a centre or are school-based;
- are designed to meet the educational and development needs of children;
- are typically designed for children at least 3 years old and not older than 6; and
- have staff that are adequately trained (i.e. qualified) to provide an educational programme for the children;

Exclude early childhood programmes that fail to meet these criteria.

8. Notably, family day care and children under three have been mostly excluded by this definition, as is any care activity (except in cases where individual jurisdictions such as New Zealand operate integrated systems and report all activity within the system). In addition to the ISCED classification, there is a manual for the reporting of data to UNESCO, OECD and Eurostat (the UOE manual). Whereas the ISCED classification gives guidance on the types of programs that should be included in ISCED 0, the UOE manual gives guidance on how data should be reported. When children receive both education and day care in the same programmes, countries should make efforts to exclude the “day care component” from the UOE reporting of personnel and finance. When no exact data on students in pre-primary programmes of mixed institutions are available, the number of students should be estimated according to the typical age group for preprimary education. This may be why some official stats appear unfamiliar or difficult to understand to those working within the systems; simply, items aren’t counted for these stats that are usually counted domestically.

9. In recent two years, EAG has expanded its ECEC activity to include collection of a range of system level metadata, which are not necessarily bound to ISCED definitions, such as whether countries consider they operate separate or integrated systems, usual starting ages, legislative frameworks, curricula, and how individual jurisdictions have followed the ISCED and UOE manual guidelines.

10. The most recent (11th) meeting of the INES Working Party agreed to continue to review the boundary between education and care, and to consider investigate inclusion of home-based programs as part of the next tranche of statistics.

11. EAG is also planning to transition to the ISCED 11 classification for its 2015 edition. Under ISCED 11, there is a new 'early childhood development' code for ECEC (0.1) targeted at children aged 0 to 2 years. We understand the addition of this new category of ECEC is likely to be considered as part of the ongoing review work agreed at this meeting. It also recommended the inclusion of ECEC network in this exercise ([EDU/EDPC/INES/WP/M(2013)1](#)).
12. The use of ISCED 11 is likely to improve the utility of data collected significantly. The full ISCED 11 definition is included at Appendix 1.

13. In sum, the key changes of significance are that:
   • Programmes for children 0-2 years are included;
   • Home-based programmes are included;
   • A much broader definition of education is used (note in particular paragraphs 105 and 106 of the appendix)
   • A distinction is made between ‘early childhood educational development’ for children 0-2, and ‘preschool programmes’ for children 3+.

14. The definition continues to emphasise intentional educational content and regulated institutional settings.

**Priorities for Implementation of ISCED 2011**

15. Paragraphs 110, 111, and 112 of the ISCED 2011 definitions contain key criteria for circumscribing ECEC. In summary, these are:
   • Duration of at least 100 days per year, and intensity of at least 2 hours per day;
   • a requirement for pedagogical training or qualification for educators;
   • a legal or regulatory framework.

16. As noted, these factors now enable inclusion of young children, and home-based (family day care) programmes.

17. The highest priority changes to data collections should therefore be –
   • to include programmes for children from age zero, and
   • to include family day care programmes

in the existing EAG indicators. Specifically, this means that the existing indicators and metadata on expenditure, enrolment, adult-child ratios, and characteristics, should be extended in coverage for these two factors.

18. The INES Working Party may wish to consider providing separate indicators for the new categories of ‘early childhood educational development’ and ‘preschool programmes’. However, aggregate indicators across both categories will also be helpful, as many ECEC systems do not ‘break’ evenly across the ISCED 11 definitions.
19. The network considers this extension of coverage as vital to obtain more complete descriptions of the ECEC systems, and to be able to compare them. The core policy utility of international indicators is comparative analysis, and the age ranges and types of institutions set out in ISCED 2011 form sometimes significant parts of ECEC systems. The ability to compare those parts of the systems is a vital element of understanding the international makeup of ECEC, and deepening our understanding of the way different systems operate.

**Definition of hom-based/ family day care programmes**

20. If home-based programmes are to be included in data collections, as suggested by ISCED 2011, it will be helpful to provide further guidance on what we would consider the parameters of home-based ECE should include. Notwithstanding the concepts discussed below on boundaries between education and care, it will be useful for the time being to, at the least, exclude informal care arrangements that might otherwise be captured.

21. The most straightforward way of achieving this will be to ensure that any home-based programmes included in new statistics meet all other criteria outlined in ISCED 2011. These are listed in full in Appendix 1, but in summary are:

- organised instruction outside the family context (paragraph 100). This implies that programs should be excluded that are delivered solely by the parents of children to those in children in their homes. The definition further notes – “...ISCED level 0 excludes purely family-based arrangements that may be purposeful but are not organized in a ‘programme’ (e.g. informal learning by children from their parents, other relatives or friends is not included under ISCED 0)…”,

- educational intent (paragraphs 105 and 106). There should be a clear intention to deliver education through the programme,

- staff qualification (paragraph 111). A requirement for pedagogical qualifications at some part of the system, noting that this does not imply all staff must be qualified, and does not specify a level of qualification, and

- a regulatory framework (paragraph 112).

22. We do not specifically note here the full set of criteria outlined at paragraph 104 (which include age range, programme intensity / duration, not part of compulsory education). We consider these items to be self-evident ‘catch all’ for any ECE program included. The same is true of the factors highlighted at paragraph 21; but we considered these particularly relevant to be applied to any home-based programmes suggested for early inclusion in data collection.

**Boundaries between Education and Care**

23. This section of this paper presents some core concepts that represent our policy view on the boundary between education and care. In summary, the ECEC network believes current split between ‘education’ and care’ activities in ECEC statistics is artificial and in many cases unnecessary, and in turn unhelpfully distorts the representative value of the statistics presented.

24. We recognise the implementation of descriptive metadata in EAG 2013, which improves the notional comparability of the information presented, but believe a more fundamental reconsideration is necessary.
25. **In the early years, education and care are inextricably linked.** The term ‘care’ in this context is used to describe the relationship between adult and child whereby an adult holds some or all responsibility for meeting the child’s needs. It is well-established that learning begins at birth. The brain is most sensitive to acquire competency in key domains of learning, such as self-control, language and problem-solving in the early years, mostly before the age of two. In later years, learning as a process can (arguably) take place in the absence of a relationship with an adult – for example, the acquisition of knowledge from reading a book. In the early years, the acquisition of core skills, knowledge, and competencies is delivered through relationships with adults.

26. **Education and care is a unified concept, but with multiple policy objectives.** In most jurisdictions, education and care has two core functions. These are usually described as ‘education’ and ‘care’ functions, but given that early education is often predicated on caring relationships, it is more useful to consider ‘adult-focused’ and ‘child-focused’ objectives:

- **Child-focused** objectives consider the learning and wellbeing of children. ECEC can be a place of social learning, where children learn to treat other people with a great diversity of ethnic backgrounds, religion, family composition, sexual preference and physical capacity with respect. The educational function of child care also stems from its role in complementing parental upbringing and supporting parents.

- **Adult-focused** objectives consider enabling those with primary responsibility for caring for the child (usually parents) to undertake activities other than caring, normally work or training. ECEC can make it possible for parents to work or participate in education or training, but also because child care is an important pre-condition for getting less well-educated parents back into the labour market.

In addition, in some jurisdictions a third objective is considered equally important:

- **Socially focused** objectives consider the joint impact of ECEC policies across society, because ECEC can contribute to an equitable society, by practising social integration and combating exclusion mechanisms. It does this by among other things developing partnerships with parents based on equality and reciprocity, enabling families from disadvantaged groups to actively participate in child care, and providing local networks.

27. In the main, a combination of different systems and services within a jurisdiction will serve all aims in different measure.

28. This is not unusual in public policy. For example, taxation systems have the primary function of collecting revenue, but numerous secondary functions (encouraging economic growth, redistribution of income, increasing or decreasing consumption of a particular product, to name but a few). It is rarely useful to try to separate out and quantify the ‘parts’ of taxation policy that are concerned with collecting revenue, and those which are concerned with secondary or ancillary goals. Instead, analysis considers the extent to which these different objectives are met within a single system.
29. Similarly, it is of central importance to recognise that the objectives are not mutually exclusive. All can be pursued simultaneously within the same system, and overwhelmingly are. For example, even exclusively ‘educational’ systems have some ability to free parents up to undertake work while the child is being educated. Schools have a similar ‘flow-on’ impact.

30. The interest of the ECEC network is mainly in child-focused and social objectives.

31. Governments are increasingly intervening actively in the early years, recognising the potential of child-focused policies to create public and private benefits. The fundamental logic of child-focused ECEC policies is that, in the early years, the brain passes through key ‘sensitive periods’ that make it particularly amenable to the acquisition of skills, knowledge and competencies. Governments deploy a wide array of policy instruments designed to capitalise on this fact, and to leverage improved child learning and wellbeing as a result.

32. These instruments may include the creation of institutions in which children participate – basically buildings, analogous to schools, with trained professionals, analogous to teachers. But they also include, for example:

- funding and regulation of contexts in which children are cared for by somebody other than a parent or family member (whether this be institutional or in another setting, such as a home);
- funding and regulation of programmes designed to support or educate parents to, in turn, maximise their child’s early learning;
- taxation, income redistribution and welfare policies designed to encourage some form of child engagement with ECEC professionals.

The above is not an exhaustive list, but is intended to illustrate a range of ways in which Governments can react to the opportunity of child-focused ECEC policies.

**Practical Implications**

33. The immediate implication of these concepts for data purposes is to recognise that, not only in a policy context, but in actuality, the ‘division’ between education and care does not exist; this is especially the case for young children. This is, to a certain extent, recognised by ISCED 2011, which does not recommend trying to ascertain what the ‘care component’ of educational programmes is, and then excluding that from measurement.

34. We therefore consider that an immediate improvement can be made by including all funded and regulated programmes within the scope of existing indicators. Several useful demarcation points are suggested by ISCED 11, including whether a programme has pedagogically trained educators; clues may also be found in whether there is educational intent contained in regulatory or legislative frameworks. These latter items are suitable points for consideration in metadata, rather than core data collections.

35. The improvement in policy utility of the indicators from this change will be similar to that noted above with regards implementation of ISCED 11. That is – data will present a more accurate reflection of jurisdiction activity and policy, and enable more comprehensive and useful comparisons.
Specific Recommendations – Next Steps

36. In the interim, we could consider that two sets of recommendations could be suggested to the INES Working Party, over the short and long term. In the short term, priority should be given to adapting existing indicators to INES 2011, as set out in [EDU/EDPC/INES/WP/M(2013)1]. As suggested above, this means:

- extending the age coverage;
- including family day care;
- removing the artificial ‘split’ between education and care.

More specific proposals as to how these items are to be implemented can be found in [EDU/EDPC/INES/WP/M(2013)1].

In addition, we recommend as a priority the development of additional indicators for the following items.

Staff

- type of staff (teacher, pedagogue, educators, early childhood professionals, assistant, paraprofessional, child minder/child carer etc.)
- working hours
- demography – gender, age, ethnicity
- qualifications held
- types of qualifications available

Accessibility

- fees for parents
- subsidies available from government or other agencies, availability criteria
- average length of waiting lists per service

In the long term consideration should be given to the strategy for improving data collection that provides a broader and deeper set of regularly updated information, as discussed at the ECEC network meeting in June 2013.
EARLY CHILDHOOD EDUCATION


A. Principal characteristics

100. Programmes at ISCED level 0, or early childhood education, are typically designed with a holistic approach to support children’s early cognitive, physical, social and emotional development and introduce young children to organized instruction outside of the family context. ISCED level 0 refers to early childhood programmes that have an intentional education component. These programmes aim to develop socio-emotional skills necessary for participation in school and society. They also develop some of the skills needed for academic readiness and prepare children for entry into primary education.

101. At this level, programmes are not necessarily highly structured but are designed to provide an organized and purposeful set of learning activities in a safe physical environment. They allow children to learn through interaction with other children under the guidance of staff/educators, typically through creative and play-based activities.

102. ISCED level 0 programmes target children below the age of entry into ISCED level 1. There are two categories of ISCED level 0 programmes: early childhood educational development and pre-primary education. The former has educational content designed for younger children (in the age range of 0 to 2 years), whilst the latter is designed for children from age 3 years to the start of primary education.

103. Programmes classified at ISCED level 0 may be referred to in many ways, for example: early childhood education and development, play school, reception, pre-primary, pre-school, or educación inicial. For programmes provided in crèches, daycare centres, nurseries or guarderías, it is important to ensure that they meet the ISCED level 0 classification criteria specified below. For international comparability purposes, the term ‘early childhood education’ is used to label ISCED level 0.

B. Classification criteria

104. For the definition of early childhood education, the following criteria are relevant:

Main criteria

a) Educational properties of the programme (see Paragraphs 105 and 106);
b) Institutional context (see Paragraph 107);
c) Typical target age of children for whom the programme is designed (see Paragraphs 102 and 108); and

Programme intensity/duration (see Paragraph 110).
**Subsidiary criteria**

a) Staff qualifications (see Paragraph 111);  
b) Existence of a regulatory framework (see Paragraph 112); and  
c) Typically not part of compulsory education (see Paragraph 113).

105. The educational properties of early childhood educational development are characterised by a learning environment that is visually stimulating and language-rich. These programmes foster self-expression, with an emphasis on language acquisition and the use of language for meaningful communication. There are opportunities for active play, so that children can exercise their coordination and motor skills under supervision and through interaction with staff. Programmes providing only childcare (supervision, nutrition and health) are not covered by ISCED.

106. The educational properties of pre-primary education are characterised by interaction with peers and educators, through which children improve their use of language and social skills, start to develop logical and reasoning skills, and talk through their thought processes. They are also introduced to alphabetical and mathematical concepts, and encouraged to explore their surrounding world and environment. Supervised gross motor activities (i.e. physical exercise through games and other activities) and play-based activities can be used as learning opportunities to promote social interactions with peers and to develop skills, autonomy and school readiness.

107. ISCED level 0 programmes are usually school-based or otherwise institutionalised for a group of children (e.g. centre-based, community-based, home-based). ISCED level 0 excludes purely family-based arrangements that may be purposeful but are not organized in a ‘programme’ (e.g. informal learning by children from their parents, other relatives or friends is not included under ISCED 0).

108. Within ISCED 0, early childhood educational development programmes are targeted at children aged 0 to 2 years; and pre-primary education programmes are targeted at children aged 3 years until the age to start ISCED 1. The upper age limit for the pre-primary education category depends in each case on the theoretical age of entry into ISCED level 1, i.e. primary education (see Paragraph 117).

109. Integrated early childhood education programmes that span the two sub-categories of ISCED 0 (i.e. education programmes for children aged 0 to the start of ISCED 1) need special consideration for classification. For programmes divided into years, stages or cycles: those corresponding to the content criteria in Paragraph 105 should be classified as early childhood educational development, and those corresponding to the content criteria in Paragraph 106 should be classified as pre-primary education. Where no subdivision of the programme exists, classification into the two categories should be based on the ages of the participants.

110. ISCED recommends the following minimum intensity and duration to improve cross-national comparability: education programmes must account for at least the equivalent of 2 hours per day and 100 days a year of educational activities in order to be classified in ISCED.

111. Where appropriate, the requirement of pedagogical qualifications for educators is a good proxy criterion for an education programme in those education systems in which such a requirement exists. It serves to distinguish early childhood education from childcare for which no explicitly pedagogically-trained staff is required.
112. Where relevant, the existence of a reference or regulatory framework issued or recognised by relevant national authorities (e.g. a ministry of education, other relevant ministry or affiliated institution) is a good proxy criterion for an education programme. This would include guidelines, standards or instructions that describe the learning opportunities provided to young children.

113. In education systems that have compulsory schooling, non-compulsory education programmes which are designed to take place before the start of compulsory education and which fulfil the criteria above are classified as ISCED level 0. In addition, in some countries the first stage or cycle of compulsory education may also be classified at ISCED level 0 if it fulfils the criteria at this level. Thus, the beginning of compulsory education is not a sufficient criterion to distinguish ISCED level 0 programmes from ISCED level 1 programmes, even though this may be the case in some education systems.

C. Programmes spanning ISCED levels

114. Education programmes spanning ISCED levels 0 and 1 need special consideration for classification. In education systems where a part of early childhood education is included with primary education, only those grades, stages or cycles corresponding to the criteria given in Paragraph 104 should be classified as ISCED level 0. Those grades, stages or cycles corresponding to the criteria given in Paragraph 124 should be classified as ISCED level 1.

115. If use of the classification criteria does not result in a clear boundary between ISCED levels 0 and 1, it is recommended that:

i) for programmes spanning ISCED levels 0 and 1 that are organized in stages, the end of the stage closest to 6 years of age should be used as the transition point between ISCED levels 0 and 1; and

ii) for programmes spanning ISCED levels 0 and 1 that are not divided into stages, grades targeting children under the age of 6 should be classified as ISCED level 0, while the remaining grades should be classified as ISCED level 1.

D. Complementary dimensions

116. One dimension differentiates education programmes at ISCED level 0:

• Target age group (see Paragraph 102).

E. Other programmes included in ISCED level 0

117. ISCED level 0 includes programmes for children with special needs corresponding to the criteria described in Paragraph 104, irrespective of their ages.

F. Classification of education programmes at ISCED level 0

118. Education programmes at ISCED level 0 are coded 010 for early childhood educational development programmes and 020 for pre-primary education programmes (see Paragraph 102). There are no sub-categories differentiated by the third digit.
G. Classification of educational attainment at ISCED levels 0 and 1

119. For classifying educational attainment, level 0 (less than primary education) is used for individuals who:

- never attended an education programme;
- attended some early childhood education (ISCED 0); or
- attended some primary education but have not successfully completed ISCED level 1 (with or without having attended ISCED 0).

Classification codes for educational attainment related to pre-primary and primary education are provided in Table 1.

Table 1: Classification codes for educational attainment related to ISCED levels 0 to 1 (ISCED-A)

<table>
<thead>
<tr>
<th>ISCED-A level</th>
<th>Category</th>
<th>Subcategory</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>Less than primary</td>
<td>01 never attended an educational programme 010 never attended an educational programme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02 some early childhood education 020 some early childhood education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 some primary education (without level completion) 030 some primary education (without level completion)</td>
</tr>
<tr>
<td>1</td>
<td>Primary</td>
<td>10 primary 100 including recognized successful completion of a lower secondary programme insufficient for level completion or partial level completion</td>
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