

**DIRECTORATE FOR EDUCATION AND SKILLS
EDUCATION POLICY COMMITTEE**

Network on Early Childhood Education and Care

THEMATIC GROUP ON OUTCOMES

OVERVIEW OF OUTCOME MEASURES IN COUNTRIES

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OECD NETWORK – THEMATIC GROUP ON OUTCOMES

DECEMBER, 2013

Following the Network meeting in June 2013, the members of the Thematic Group on Outcomes were asked to undertake the two important following tasks.

First, the group was asked to revise the *Early Learning and Development Common Understandings* document which received considerable input from the small group discussions at the June, 2013 meeting. The completed document was revised with considerable input from the Thematic Group members in order to be presented to the membership of the OECD Network on ECEC at its meeting in December 2013.

Second, the group was invited to work on the development of a list of child outcomes and possible measures and/or measurement instruments for children in ECEC programs.

In order to determine the current state of child development indicators and instruments currently in use within the membership of the Thematic Group on Outcomes, the group members were asked to review The UNESCO publication entitled: *The Review of Care, Education and Child Development indicators in Early Childhood* (2010). (Appendix 1)

This publication is a current review of the existing indices and indicators for ECEC which was prepared for UNESCO by Alfredo Tinahero and Anais Loizillon.

The Thematic Group members were asked to respond to the following questions in order to determine extent to which some of the UNESCO identified instruments and indicators were in use within each jurisdiction and to determine the range of outcomes and possible measures they might like to investigate.

1. Which of the instruments listed in the UNESCO resource document are you using to measure outcomes in your jurisdiction/country?
2. Which of the instruments included in the UNESCO document would your jurisdiction/country like to examine in more detail for possible implementation?
3. After reviewing the final version of the *Early Learning and Development Common Understandings* document, in your opinion what areas of outcomes in ECEC could/should be investigated as possible measures?

Australia

Q1 Australian Early Development Instrument

Q3 The areas that Australia suggests should be used to measure are:

- educators' relationships with children
- an active learning environment
- children's wellbeing during their day in early learning and care settings
- children's involvement in their curriculum

Additional comments:

1. the key determinants for children's successful learning outcomes are the pedagogical relationships and practices of educators
2. Rather than focusing on children's achievement and developmental norms the focus is on the impact of the environment for children's wellbeing and involvement. By focusing on wellbeing and involvement the responsibility for children's engagement and achievement in the early childhood setting rests with educators and their learning environment rather than with children.
3. relationships are of fundamental importance to young children's learning
4. the most supportive environment is one which respects young children as active competent learners
5. children's level of involvement and wellbeing are two of the most conclusive indicators of how well an educational setting is meeting the learning and developmental priorities of children

Canada

Q1 Early Development Instrument

Q2.

- Early Years Evaluation
- Early Childhood Environmental Rating Scale – Revised (ECERS-R)
- 18 month Child Wellbeing Assessment

Q3. There is considerable interest in the development of an assessment which is focused on the individual child and which measures the growth and development of that child's social, emotional competencies and well as the areas of problem solving, curiosity, language development, creativity, second language acquisition and respect for nature. The assessment should be designed to show the growth of the child in each area as a means of stimulating the engagement of the parent. The assessment of the child should not measure and report that child's development against some identified standard.

Additional Comments:

We would like to see the Network and the Thematic Group on Outcomes begin work with globally recognized ECEC researchers on the development of a formative instrument that honours the fact that the majority of practitioners and OECD member nations want to focus on non-cognitive outcomes for children in ECEC programs.

Germany

Q1 Different aspects from the UNESCO review are included in:

- German parental survey AID:A (“Aufwachsen in Deutschland: Alltagswelten/Growing Up in Germany”)
- the longitudinal German National Educational Panel Study (NEPS)
- the ET 6-6 („Entwicklungstest 6 Monate bis 6 Jahre/A Method for Developmental Assessment in German-Speaking Countries 6 Months to 6 Years, socio-emotional and practical skills)
- the Strengths and Difficulties Questionnaire (Engl. version Goodman 1999, German version Klasen et al. 2003; prosocial behaviour and problem behaviour)
- aspects of the EDI are replicated in the German observation instrument KOMPIK (Kompetenzen und Interessen von Kindern/Competencies and Interests of Children)

Q2 Interest in aspects of the following type of study:

Mothers/care takers opinions about their children’s early literacy skills, language comprehension, early numeracy skills, motor skills, and pro-social behaviour (For the analysis one would have to consider how/if the values on these items can be calculated to a sum value as the items quite different constructs.)

Q3 In line with our discussions within the network, we think that the assessment of children’s cognitive skills (e.g. language skills) in an international comparative study needs to be considered very carefully. To date there are only few standardized, validated and normed instruments which have already been adapted into different languages.

- To assess children who are acquiring early second languages requires instruments that have been normed with age and matched to early second language learners, (e.g. *the diagnostic instrument LiSe-DaZ® (“Linguistische Sprachstandserhebung Deutsch als Zweitsprache/Linguistic Language Assessment – German as a Second Language”) (age)*).
- PPVT-D (Peabody Picture Vocabulary Test, engl. version PPVT-4, Ages 2-6, Dunn & Dunn 1997) assesses children’s receptive vocabulary, i.e. only one dimension of children’s language competence.
- We would also like to suggest SISS (Social Skills Improvement Scales, Ages 3-18, Gresham & Elliot) to be reviewed for implementation; a German version of the instrument was developed for the German NUBBEK study.

Additional comments:

1. Generally, we would propose to avoid using observation instruments to measure children's cognitive competencies as they rely on the subjective judgements of practitioners.
2. In line with the network, we see a higher value in the assessment of children's social-emotional development and children's subjective well-being in an international comparative study.
3. One task the network could consider is conducting a review of instruments to assess young children's subjective well-being.
4. Recommend that the OECD Network and Thematic Group on Outcomes conduct a review of instruments which assess young children's subjective wellbeing

Japan

Q1. Japan is not using the instruments listed in the UNESCO resource document to measure outcomes.

Q2. We are interested in examining the following instruments:

1. Inequality in child well-being in the world's richest countries (UNICEF)
2. Multiple Indicator Cluster Surveys (MICS 4) UNICEF
3. Child Well-being Index
4. Early Development Instrument

Q3 This is a very challenging question for us.

- Community and citizenship,
- Critical thinking and problem-solving,
- Cooperation and collaboration,
- Creativity and imagination,
- Social Competence

Additional comments:

Japan is not measuring children's outcome systematically except children's health condition in ECEC facilities. However, we understand deeply the importance of measuring outcomes and need to learn from the OECD countries and their experiences with measuring outcomes.

Norway

Q1.) Norway hasn't nationally implemented any of the instruments listed in the UNESCO resources document. But in ongoing research on the effect of ECEC on children's development and wellbeing some of the instruments are used, such as ITERS, ECERS-R and E, CIP (Caregiver Interaction Profile) and ASQ

The Norwegian curriculum framework states: "The quality of the everyday interaction between people at the kindergarten is one of the most important factors for the development and learning of the children. The well-being and development of the group of children and individual children shall therefore be observed and assessed on an ongoing basis."

A national survey indicates that 95 percent of kindergartens use observation as their method, other methods is "tales of practice" and "pedagogical documentation". "Child interviews" have been increasing over time, but only 37 percent make use of this method.

One example of instruments used locally in Norway is TRAS. This instrument is developed in Norway and aims to measure language development over time and identify children with language disabilities. TRAS is an instrument for measuring children at the age of 2-5. 90 percent of the kindergartens in Norway use TRAS. An observation tool for assessment of children's overall development called ALLE MED¹ (Everybody in) is reportedly used by 56 percent of kindergarten educators.

Q2.) At this point we think it is important to have an open mind as to what kind of instruments we would be interested in examining and look beyond the instruments listed in the UNESCO document. We are not convinced that the instruments listed in the UNESCO report are exhaustive for assessing quality in ECEC and outcomes for children. However, we understand from the presentation in the network that EDI is used in many countries in the network. As we are interested in measuring children's wellbeing and the learning environment (process quality) ITERS and ECERS-R might be a suitable instrument for us to examine. ECERS-R is already being used in many countries and it could be interesting to see how it will work across cultural differences.

Q3.) A broad perspective on outcomes is essential. It is particularly relevant to assess children's well-being and development as part of a formative assessment. The assessment should be conducted in order to insure the best possible learning possibilities and wellbeing environment for children.

Outcomes need to be broadly defined as a result of a holistic view of the child. We need to focus on non-cognitive outcomes such as curiosity and social skills.

Portugal

Q1.) In Portugal we not using any of the documents listed in the UNESCO resource document. Assessment indicators for the children's cognitive, social, emotional and psychomotor development are used, in order to promote school success, health and well-being. The planning must be based on actively listening to the children and evaluating their activities. Recording and documenting the methods used and the information shared is essential.

Q2.) We consider that it's important, with the holistic development in mind, to include in one instrument indicators like: *Poverty, Biological and environmental factors, Mother and home environment, child cognitive, socio-emotional development and school readiness.*

Nevertheless, we would like to examine Early Development Instrument (EDI) in more detail. Q3.) The ‘common understanding’ of ‘commitment to high quality programs and services’, should be expanded. Thus, we underline the following statements:

- Early childhood development requires access to high quality programs and services in childcare settings
- The services provided should focus on children's needs, interests, culture and family context and acknowledge the active role of the children in shaping their own development and learning in interaction with the environment, which will allow them to grow and evolve;
- Childcare settings should provide diverse educational experiences and enable extended social interactions;
- Respecting and valuing the individual characteristics of the child is the basis for new learning experiences;
- ECEC should be based on cooperation and include all children, respecting differences, supporting the learning process and responding to individual needs.

Additional comments:

We highlight the following benchmark in indicators:

i) Quality of the settings:

- Both in and outside facilities and quality materials, age appropriateness, accessibility for the child, functionality, durability and aesthetic value;
- Organization of the learning environment;
- Quantity/ area of space per child;
- Health care, hygiene and safety;
- Fire prevention;
- Child welfare.

ii) Quality of the interactions:

- Intervention of the educator;
- Interactions between the child and the educator, the family and the educator, the teachers and the school board;
- Planning educational practices, identifying specific characteristics of the group of children, conceiving pedagogic projects;
- Participation of children in planning, implementation and assessment of learning;
- Encouraging and strengthening the capabilities of the children;
- Ratio children/ adults

iii) Quality of learning:

- Adequacy of the curriculum to the age, the needs and the interests of children
- Adequacy of the curriculum to the context features;
- Using routines to develop and integrate new learning experiences;
- Quality and complexity of the stimuli provided by the learning environment;

- Diversity of activities.
- iv) Integrated support:**
 - Programs which support the families;
 - Developing differentiated strategies along with other professionals and organizations (such as healthcare centres...).
- v) Training of professionals:**
 - Initial and long life training;
 - Collaboration with colleges and universities; contributions from research in the field of Educational Science;
 - Opportunities for professional development;
 - Updating and innovating educational practices;
- vi) Evaluation of educators, settings curricula. child learning and development:**
 - External evaluation monitoring educational services,

Spain

Q1.) Children attend ECE programs from 0-6 years old and it is not compulsory; ECEC programs are organized in 1st and 2nd stage (0-3; 3-6). Assessment is continuous and holistic based on interviews with the families, direct observation of the children. The assessment is useful in detecting any kind of special need and to observe their learning development. We do not use any of the UNESCO measures. We do focus on looking for children's strengths.

Q2.) We think that EDI instrument is interesting because it provides information on five measures of development, namely physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge.

Q3.) We don't think we could dismiss any of them because they are important to understand children, education and context as a whole.

Sweden

Q 1. We do not use any of the instruments listed in the UNESCO document.

Q 2. We would not be interested in implementing any of the instruments listed in the report.

Q 3. We evaluate the quality at preschool level. Evaluating the quality of the preschool and creating good conditions for learning requires that the child's learning and development be monitored, documented and analyzed. The primary outcomes that should be evaluated are children's wellbeing, learning and development.

OECD Network – Thematic Group on Outcomes

Summary comments:

The examination of current practice across the Thematic Group member nations reveals, in many ways, the current state the international debate on defining outcomes and appropriate measures for ECE programs and the development of children with those programs. Clearly, there is a significant interest in being able to demonstrate the positive impact of early childhood programs. However, there is a significant divide among member nations on whether any form of assessment of the child, other than the critical connection among the child, the parent and the ECEC educator. On that issue, all members of the thematic group are in accord.

Of the submissions received, 6 of the 8 nations responding indicated they were not presently making use of any of the instruments listed in the 2010 UNESCO publication, *The Review of Care, Education and Child Development Indicators in Early Childhood*. Two these nations indicated that they were making use of research and locally developed measures which in some ways replicated some of the instruments listed in the UNESCO document. The remaining two submissions indicated national utilization of the Early Development Instrument (EDI) or an adaptation of that instrument as in the Australian EDI.

Of the 8 nations responding to the Thematic Group survey, 6 of the 8 respondents expressed a degree of interest in continuing full implementation of the EDI or in examining its applicability within their national settings.

The all 8 of the Thematic Group respondents were very clear about which elements of the *OECD Early Learning and Development Common Understandings(2013)* document are most important in examining possible outcomes in ECEC programs. They identified the following areas within ECEC programs that merit extensive examination in relation to child outcomes:

1. A focus on the wellbeing of each child and a view of each child as competent and capable.
2. The positive relationship among the child, the parents and the ECEC educator
3. The quality of an active, engaging, play-based program
4. The quality of the ECEC active learning environment
5. The quality of the interaction between the child and the educator
6. A focus on the growth and development of each child as a means of engaging and supporting parents
7. A balance between qualitative and quantitative measurement and reporting of ECEC outcomes is considered desirable.

Appendix 1

Care, Education and Child Development Indicators

Commissioned by UNESCO within
the framework of the Holistic Early
Childhood Development Index



Review of care, education and child development indicators in ECCE

Desk review prepared for UNESCO on existing indices and indicators

Alfredo R. Tinajero and Anaïs Loizillon

Review of care, education and child development indicators in ECCE

Alfredo R. Tinajero and Anaïs Loizillon

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Summary

This report will contribute elements for the design of a Holistic Early Childhood Development Index (HECDI) for use worldwide to monitor progress towards the achievement of Education for All (EFA) goal 1. The need for the HECDI was recently acknowledged at the World Conference on Early Childhood Care and Education, held in Moscow in September 2010.

This report, part of a series of desk reviews to prepare the development of the HECDI, will critically and analytically review existing early childhood indices and indicators in the areas of child development, developmental care and education from birth to the age of 8. This vast area includes access to quality formal early care and learning programmes and measures of cognitive and socio- emotional development, as defined and produced by the EFA convening agencies, critical lead organizations that support early childhood care and education (ECCE) and regional representations of Member States.

The purpose of this review is to answer the following questions: (1) Which characteristics are crucial to the HECDI? (2) What indices and indicators are commonly used worldwide to measure child development, developmental care and education? (3) What recommendations can be made for the inclusion of child development, developmental care and education measures in the HECDI? On the

basis of the existing literature, we develop a framework within which we evaluate existing indices and indicators in this area. The reviewed composite indices were found to lack indicators of early cognitive and socio-emotional development, maternal health and well-being, quality of caregiver- child interaction, quality of early learning programmes, and screening for children's disabilities. Most of these gaps can be filled by existing measurements of child development also discussed in this report.

Appendix 5: A selection of existing early childhood development and well-being indices

Index	Author(s)
African Union Indicators for Monitoring the Plan of Action for the Education in the Second Decade	Association for Development of Education in Africa; Arnott et al. (2008)
Australia Early Development Index (AEDI)	Australian Department for Education, Employment and Workplace Relations; Sanson et al. (2010)
Child Development Index in Peru	UNICEF, Instituto Nacional de Estadística e Informática (2008, 2011)
Child Development Index - Save the Children	Save the Children (UK) (2008)
The Child Development Index: The State of Brazil's Children 2006	UNICEF (2005), in The State of Brazil's Children 2006
Child Status Index (CSI)	USAID, MEASURE Evaluation and Duke University (O'Donnell K. et al., 2008)
Child Well-Being Index (EU + Norway + Iceland)	Bradshaw (University of York) and Richardson (OECD) (2009)
Dimensions of child well-being	UNICEF Innocenti Research Centre Report Card 7 (2007)
Early Childhood Development Policies Around the World - WB	World Bank, Emiliana Vegas (2011, draft phase)
Early Development Instrument (EDI)	Janus and Offord, Offord Centre for Child Studies , McMaster University (2007)
Early Learning and Development Standards (ELDS) in East Asia and the Pacific	UNICEF East Asia and Pacific Regional Office; Miyahara and Meyers (2008)
Early Learning and Development Standards for Children from 0-6 years (Republic of Macedonia)	Republic of Macedonia, Ministry of Labour and Social Policy (2009); UNICEF

Family Care Indicators (FCIs)	Hamadani et al. (2010)
A Framework of Early Childhood Indicators for General Comment 7 (CRC)	GC7 Indicators Group (OHCHR, UNCRC, UNICEF, WHO, International Children's Centre, HELP at University of British Columbia, Bernard van Leer, Aga Khan Foundation, Consultative Group on ECCD); Vaghri et al. (2010)

Index	Author(s)
Indicators for Early Childhood Development (Western Cape Province, South Africa)	Child, Youth, Family and Social Development , Human Sciences Research Council; Dawes et al. (2006)
Indicators for Early Childhood Education in Latin America	UNESCO-ORLEAC Santiago, Regional Office for Education in Latin America and the Caribbean (2008)
Inequality in child well-being in the world's richest countries	UNICEF Innocenti Research Center, Report Card 9 (2010a)
Multiple Indicator Cluster Surveys (MICS 4) UNICEF	UNICEF (2011)
OECD Child Well-Being Indicators	OECD, Directorate for Employment, Labour and Social Affairs (2009)
OECD Early Childhood Education and Care (ECEC)	OECD, Directorate for Education, ECEC Network
A Report Card on Child Protection	UNICEF Innocenti Research Centre Report Card 8 (2009b)
State-level indicators for socio-emotional development	National Center for Children in Poverty
United States National Indicators for Child Health	National Center for Children in Poverty; Seith and Isakson (2011)
World Vision Child Well-Being Outcomes (CWBO)	World Vision

Source: Adapted from Loizillon (2011).