

**Informal Consultation of ECEC Ministries and National Statisticians
concerning data collection on early childhood services
within the Ines framework**

**DATA NEEDS IN EARLY CHILDHOOD
EDUCATION AND CARE**

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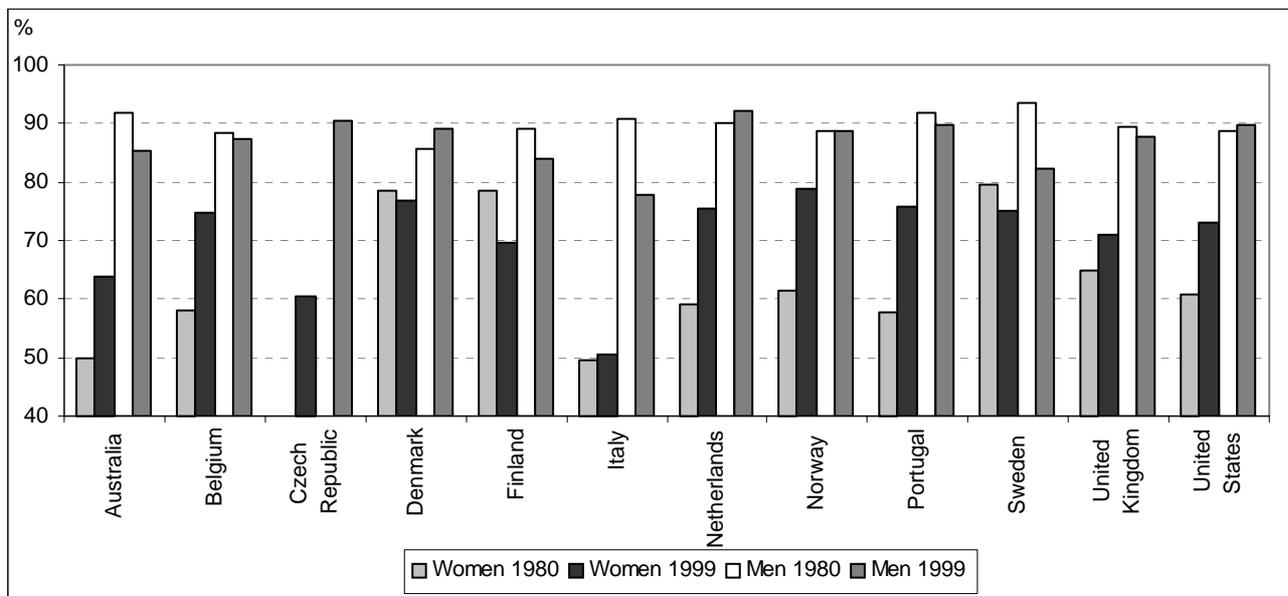
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Data Needs in Early Childhood Education and Care

Background

1. In March 1998, a series of country reviews of early childhood education and care (ECEC) policy was launched by the OECD, under the auspices of the Education Committee. The rationale for the initiative was both practical and urgent. Women with young children were joining the labour market in ever greater numbers. At the same time, other family members or neighbours were no longer available to look after children. In the last decade of the century, organised early childhood provision outside the home had become a feature of all OECD economies. *Public* support for these services was increasingly expected to ensure their quality and to guarantee women with young children equality of opportunity with regard to work.

Figure 1. Employment/Population ratio of 25-34 year-olds in selected OECD countries, 1980-1999



Sources: For all countries except Italy, OECD Labour force statistics database; data for Italy provided by EUROSTAT.

2. Research also pointed to the value of high quality EC experiences in promoting the cognitive, social and emotional well-being of children, and later, their long-term success in school and life (EPA, 1999). This was a finding of real interest to education ministries. Twelve countries volunteered to participate in the review: Australia, Belgium, Czech Republic, Denmark, Finland, Italy, the Netherlands, Norway, Portugal, Sweden, the United Kingdom and the United States. Between 1998 and 2000, OECD review teams conducted visits to the 12 participating countries. A further round of reviews covering a further seven or eight countries will take place from 2002 to 2004.

3. The results of the first series of reviews were recorded in a comparative report, entitled *Starting Strong: Early Childhood Education and Care*, published by the OECD in 2001 (OECD, 2001).¹ A clear conclusion is that the debate about services for young children has shifted in the OECD countries from whether governments should invest in early childhood services to how provision should be effectively financed, organised and managed.

4. By its nature, however, the ECEC field is a complex one. Due to the variety of agencies involved, the diversity of services both formal and informal, and weaknesses in both policy co-ordination and data collection, it can be difficult to form a clear picture of the provision and its effectiveness. Hence, there is a pressing need to develop clear indicators for the field and to organise systematic data collection at national level. In the following text, I shall focus on two questions: how the national collection of data in the early childhood may be improved; second, how the progress of young children in early childhood centres may be assessed and monitored at national level.

Section I - Improving data collection in the early childhood field

5. A useful first step would be the *redefinition and expansion of data collection* beyond the present ISCED "level zero" perspective, to include all early education and care services for young children. Within the enlarged perspective, pre-primary education for the 3-6 year olds would continue to be examined, but so also would other registered provision - including for the 0 - 3 age group - if it has sufficient intensity and provides effective cognitive and social development for children. In this perspective, recognised categories, such as family daycare; day nurseries; daycare centres; age-integrated daycare centres; playgroups; nursery/pre-school education; after-school care; and special services, would be closely monitored and reliable data collected on each. The Danish researchers, Rostgaard and Fridberg (1998), basing their research on official documents and national experts' advice, have already made a start in defining service types and comparing them across countries in terms of full-time equivalents.

6. Second, it would be helpful for early childhood policy makers to have *reliable figures on public and private subsidies toward young children, disaggregated to cover key elements of expenditure*, e.g. expenditure on the various ECEC service types; expenditure on maternity and parental leave; expenditure on child allowances and other transfers toward families with young children, including cash benefits, tax credits and employer contributions to cover childcare expenses.² Financial tracking and monitoring contribute to accountability, and help to inform planning and resource allocation. For example, where efficient use of resources is concerned, it would be useful for ministries to know the comparative unit costs for a child in a public crèche, as compared to a place in publicly funded family daycare or age-integrated centre, or as compared to being looked after at home, through the provision of paid parental leave. Obviously, the best interests of the child need to be taken into account in such calculations.

7. Thirdly, *broad indicators for early childhood systems need to be developed*. There is a tendency to measure the effectiveness of early childhood interventions through a narrow selection of outcome or impact indicators, generally focussed on the child, e.g., early literacy measures as children exit kindergartens or enter the first year of compulsory schooling. The practice has its uses (see Section 2) but it overlooks key inputs and other important outcomes for children in this age group. In terms of inputs, we need to know, for example, what are adequate financing levels for early childhood services, what child-

1 . Information on the reviews, including the text of Starting Strong, can be obtained from OECD website: <http://www.oecd.org/edu/earlychildhood>

² In Norway, the Ministry of Children and Family Affairs compiles the annual expenditures on children across all Ministries into one document to show what share of the budget is spent on children, as well as to formulate government objectives and policy for children across sectors.

staff ratios are needed, etc. Where outcomes are concerned, the US National Education Goals Panel (1997) has identified five dimensions that contribute significantly to children's success in school: health and physical development; emotional well-being and social competence; positive approaches to learning; communication skills; cognition and general knowledge. Countries need to develop measurable indicators within each of these dimensions.

8. Fourth, *more dynamic methods of statistical analysis in the early childhood field*: By dynamic is meant the ability to treat data as interactive variables, whose impact on system goals can be measured with some degree of accuracy. An example from lower secondary education is the recent PISA (Programme for International Student Assessment) exercise carried out by the OECD across 32 countries (OECD, 2002). PISA allows a dynamic relationship to be established between *student-related data*, e.g. family and socio-economic background, and *learning environment data*, e.g. funding or staffing levels of the school system, and reveals the intersecting impacts of different variables on selected goals of the school system.

9. Fifth, *a focus on the key issues of demand, supply, equitable access and quality* (Olmsted, 2001). As these issues have still not been satisfactorily resolved for early childhood services in most countries, particularly for the lower age group 0-3 years, the data collected should be capable of providing adequate information to policy makers to forecast and plan provision, and in parallel, to measure the quality and appropriateness of services offered to different groups of children. The experience of the OECD early childhood review suggests that much information on these issues is available, but that the data may not be well organised or easily exploitable.

Section II - Developing indicators to monitor child outcomes at national level

10. Measuring learning achievement in the various subject areas is a central means in *formal education systems* of evaluating both programme quality and the progress of the individual child. However, where very young children are concerned, learning achievement must be seen as part of a wider set of outcomes that include health, emotional well-being, social skills and the reduction of at-risk factors. Moreover, early education authorities in many countries consider individual child *testing*³ to be inappropriate in the early years, whether it is carried out through *standardised tests* or in the form of *teacher-administered exit or entry tests*. Early childhood development is particularly episodic, making it difficult to distinguish transient delays from more persistent difficulties (Meisels *et al.*, 1996, Committee on Integrating the Science of Development, 2000). Where young children are concerned, an assessment approach - based on long-term teacher observations, development records and portfolios, analysis of children's work, project assessments, and parent interviews - would seem to be a surer way to follow their development. (Wortham, 2001)

11. Although most countries take the age of the child as the basic criterion of "readiness for school", some wish also to obtain a measure, or at least a sense of the learning achievement of young children in early childhood centres. Sometimes, the focus is on literacy skills and/or knowledge items, e.g. New York State introduced in 1999 an *Early Childhood Literacy Assessment System* (ECLAS) as a primary instrument for teachers to measure children's literacy skills at kindergarten level (aged 5 years). The difficulty with this type of approach is not that measures of emergent literacy are irrelevant – the co-

³. To be distinguished from screening of children for suspected developmental delays. Bowman *et al.* (2000) explain that though there is overlap in the use of the words "test" and "assessment", the former refers to a standardised instrument, formally administered and designed to minimise all differences in the conditions of testing. Assessments tend on the contrary to use multiple instruments (observations, performance measures, interviews, portfolios and examples of children's work...) and take place over a longer period of time.

relation with other developmental indicators seems high (Denton & West, 2002) – but that obligatory literacy assessments may distract attention from fundamental structural and programmatic requirements that are often outside the control of the individual teacher.

12. Again, a culture of testing may focus teacher attention on particular skill measures, in this case literacy, at the cost of wider developmental goals. Further, when it influences teachers to "teach to the test", formal instructional methods are likely to be used in early childhood centres. Research shows that these methods can lead to anxiety and low self-esteem in young children, and later to mediocre literacy results in primary school (Sylva and Wiltshire, 1993, Kavler *et al.* 2000).

13. For these reasons, national professional surveys or studies - that take into account a range of developmental goals and key competencies⁴ - may be the surest way for governments to obtain a national measure of how children are developing in publicly-funded early childhood centres. These professional surveys would be carried out by trained specialists through sampling, thus allowing teachers to concentrate on positive interaction with children, guided by a national curriculum and by the programme defined by each centre to meet the needs of participating children and families.

14. If a professional survey approach is adopted, it will be useful to link child development outcomes with factors that may have an important impact on them, namely, child-related variables; the characteristics of the early childhood system, and not least, certain key features of the early childhood learning environment. If these factors can be reliably linked with learning outcomes through research and surveys, the process will yield valuable information for evaluation and corrective purposes.

4 . European Union countries, for example, stress a broad range of early childhood goals and competencies: the socio-emotional development of the child (well-being, self-confidence, autonomy...), social competence (social skills, co-operative attitudes, respect for the environment, citizenship...), co-operation with families, health and physical development, and certain learning areas, such as emergent literacy, mathematics and science, introduction to art, etc. (EUROSTAT, 1999).

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