

REPORT TO: Education Committee

MEETING DATE: 22 November 2016

BY: Depute Chief Executive (Resources and People Services)

SUBJECT: Early Development Instrument: Assessing Children's
'Readiness to Learn'

1 PURPOSE

- 1.1 To inform members of the initial results and preliminary conclusions from the Early Development Instrument (EDI) survey, a tool for assessing children's readiness to learn on entry to Primary 1.

2 RECOMMENDATIONS

- 2.1 The Education Committee is asked to note:
- i. The results from the Early Development Instrument (EDI) as a significant asset in engaging communities in preparing pre-school children for learning, and for services to better plan a more integrated approach to children's early development.
 - ii. That results for East Lothian are comparable with other international surveys of children's readiness to learn using EDI.
 - iii. That although the majority of children entering P1 have the skills needed for successful learning there is a notable variation in children's 'readiness to learn' across the county, and across socio-economic groups.
 - iv. Officers will work with key stakeholder groups and organisations to prepare an action plan to address the variation in children's early development across the county.
 - v. The Resilient People Partnership will work with partner agencies to reflect on how the variation in children's early development across the county impacts on planning and service decisions.

3 BACKGROUND

- 3.1 In 2011, as part of the Support from the Start programme, a partnership was established between East Lothian Council and the Scottish

Collaboration for Public Health Research & Policy based at Edinburgh University to pilot a population based measure of children's readiness to learn called the Early Development Instrument (EDI).

- 3.2 The instrument provides a measurement of children's pre-school development. It is not a diagnostic assessment of individual children. It measures children's readiness to learn in the school environment in relation to child development domains rather than curriculum-based ones. It is administered by P1 Teachers. The teacher uses her/his professional observations after several months of classroom/school interaction with the child to complete the questionnaire.
- 3.3 The instrument is used internationally and there is interest from elsewhere in Scotland in East Lothian's use of this data given the focus on reducing inequalities in outcomes in the early years. The initial EDI survey and associated research established that the EDI was appropriate to a Scottish context and that it generated information useful for services and communities in planning improvement to children's wellbeing.
- 3.4 The results from the 2012 East Lothian Council EDI survey were the first measurement of children's readiness to learn in Scotland. The 2016 data provides the opportunity to compare East Lothian's current cohort of 5- 6 year olds with those from 2012. The instrument also provides measurable information for groups of children in order to:
 - Identify what percentage of children are "vulnerable for early learning" in our communities *and* in which development domains
 - Provide a picture of what early learning looks like at community level
 - Report on populations of children in different communities over time
 - Identify strengths and where the needs are greatest
 - Assist in predicting how children will progress in primary school
 - Inform future programme and service delivery.
- 3.5 The EDI measures children's readiness to learn at school (or school readiness to learn). This term refers to the child's ability to meet the task demands of school, such as being cooperative and sitting quietly and listening to the teacher and to benefit from the educational activities that are provided by the school. There are five domains of readiness to learn as described in Appendix 1. Children are considered to be vulnerable if their score in one or more of the developmental domains is at or below a specified cut-off score.
- 3.6 Services for Education and Children's Wellbeing work together to improve outcomes for those children who live in the most disadvantaged areas within our communities. The data from EDI can be used strategically to support planning for Education and Children's Wellbeing to address the complex problems that lead to poor outcomes for some children.

3.7 Further analysis of the EDI data is underway to provide information at a cluster and school level. This analysis will provide valuable information to inform cluster and school improvement planning with relevant partners.

3.8 Preliminary conclusions from the initial results of the 2016 EDI survey data:

3.9 **Preliminary conclusions from the initial results of the 2016 EDI survey data:**

- Overall the results of the 2016 EDI show similar developmental patterns as those observed and reported on in 2012. Greater percentages of children were vulnerable in Physical Health and Wellbeing, Emotional Maturity and overall across the five domains in 2016 compared to 2012. It is noted that this pattern is seen in other international studies using EDI. A slightly smaller number of children were vulnerable for Social Competence, Language and Cognitive Development, and Communication Skills and General Knowledge in 2016 compared to 2012.
- The percentage of children that attended an early learning programme prior to school entry remained high at 99.1% in 2016 compared to 98.6% in 2012.
- The number of children who have a special needs categorisation rose from 3.6% (N=42) in 2012 to 8.3% (N= 105) in 2016. Further analysis is needed to explore the nature of the special needs and the reasons for this increase.
- Girls are less likely to be vulnerable compared to boys. Overall boys scored less well than girls on all the developmental domains with the greatest differences seen in their social competence, emotional maturity and in their communication and general knowledge.
- There remains a clear socio-economic gradient to 'vulnerability' across the county with 38% for SIMD quintile group 2 compared to 23% for SIMD quintile group 5 considered to be vulnerable in their readiness for learning. The largest increase in vulnerability was for children in SIMD quintile group 1 but given the small sample size the results should be interpreted with caution.
- Some improvement is noted in specific developmental domains for children in the SIMD quintile groups 2 and 3, which may be attributable to school and community campaigns to improve communication, language and social skills.

4 POLICY IMPLICATIONS

4.1 The data from EDI will assist in planning for Education and Children's Wellbeing services. They will assist the cluster based Area Partnerships

and Support from the Start groups with engaging local parents to improve children's readiness to learn.

- 4.2 It will contribute significantly to the Single Outcome Agreement (SOA) – 'East Lothian's children have best start in life and are ready to succeed' by helping communities and services to target and develop community resources for early child development.
- 4.3 The data will support schools and nurseries to plan for supporting children's learning within the Curriculum for Excellence.
- 4.4 The data will support schools and community wellbeing services, as well as primary health care services to engage early years parents and the broader community in children's early development and readiness to learn.

5 INTEGRATED IMPACT ASSESSMENT

- 5.1 The subject of this report does not affect the wellbeing of the community or have a significant impact on equality, the environment or economy.

6 RESOURCE IMPLICATIONS

- 6.1 Financial – Future surveys would require payment of license fees to McMaster University in Canada.
- 6.2 Personnel – None
- 6.3 Other - None

7 BACKGROUND PAPERS

- 7.1 Appendix 1 EDI Factsheet (attached).
- 7.2 Results of the East Lothian, Scotland 2016 implementation of the early Development Instrument (Technical report) Authors D Vinoraj, E Duku & M Janus which has been lodged in the Members Library

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Between Jan-March 2016 1259 P1/2 children within the specified 4-5 age range participated in the study with 116 children excluded from the analysis on the basis of known ASN or other criteria such as ill health

Revised: August, 2004

EARLY DEVELOPMENT INSTRUMENT (EDI): A Population-based Measure for Communities

Appendix 1.

FACTSHEET

This instrument is an outcome measure of children's early development.

It measures children's readiness to learn in school environment in **five general domains identified in the literature: physical health and well-being; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge** in relation to developmental benchmarks rather than curriculum-based ones.

The *Early Development Instrument* can be applied at either junior or senior kindergarten level, i.e. for either 4 or 5-year olds. A teacher uses her/his observations after several months of classroom/school interaction with the child to complete the questionnaire.

The instrument provides information for groups of children in order to:

- 1) report on areas of strength and deficit for populations of children,
- 2) monitor populations of children over time,
- 3) predict how children will do in elementary school.

The EDI was developed by Drs. Magdalena Janus and Dan Offord at the Offord Centre for Child Studies, McMaster University, with support of a national advisory committee. It is largely based on the National Longitudinal Survey of Children and Youth (NLSCY) and other existing developmental tests. Between 1998/99 and 2004/04 it has been implemented with over 290,000 students nation-wide.

The purpose of the instrument is to report on populations of children in different communities. It is intended to help communities assess how well they are doing in supporting young children and their families and assist in monitoring changes.

READINESS TO LEARN CONCEPT

The EDI is based on the **readiness to learn** concept.

We know that children are born ready to learn; it means that their neurosystem is pre-programmed to develop various skills and neuropathways, depending on the experience it receives.

The EDI measures children's **readiness to learn at school** (or school readiness to learn). This term refers to the child's ability to meet the task demands of school, such as being cooperative and sitting quietly and listening to the teacher, and to benefit from the educational activities that are provided by the school.

FIVE DOMAINS OF SCHOOL READINESS TO LEARN

There are five domains of school readiness to learn included in the Early Development Instrument.

1. *Physical health and well-being*

Includes: gross and fine motor skills:

- holding a pencil,
- running on the playground,
- motor coordination
- adequate energy levels for classroom activities
- independence in looking after own needs
- daily living skills

2. *Social knowledge and competence*

Includes:

- curiosity about the world,
- eagerness to try new experiences,
- knowledge of standards of acceptable behaviour in a public place,
- ability to control own behaviour,
- appropriate respect for adult authority,
- cooperation with others,
- following rules
- ability to play and work with other children

3. *Emotional health/maturity*

Includes:

- ability to reflect before acting,
- a balance between too fearful and too impulsive
- ability to deal with feelings at the age-appropriate level
- empathic response to other people's feelings

4. *Language and cognitive development*

Includes:

- reading awareness,
- age-appropriate reading and writing skills
- age-appropriate numeracy skills
- board games,
- ability to understand similarities and differences,
- ability to recite back specific pieces of information from memory

5. *Communication skills and general knowledge*

Includes:

- skills to communicate needs and wants in socially appropriate ways
- symbolic use of language,
- story telling,
- age-appropriate knowledge about the life and world around;

TWO ADDITIONAL INDICATORS:

Special skills

Includes: literacy, numeracy, dance, music, etc.

Special problems

Includes: health problems, learning problems, behaviour problems