PIAAC 2012

INFORMATION NOTE

1. BACKGROUND

1.1 What is PIAAC?
The OECD’s Programme for the International Assessment of Adult Competencies (PIAAC) is a major new international survey of adult skills. The survey builds on the concepts and methodology of previous international studies, the International Adult Literacy Survey (IALS) and the Adult Literacy and Life Skills Survey (ALL), but PIAAC is unprecedented in the broad range of its analysis objectives and the large number of countries (24) that participated.

PIAAC has been designed primarily to provide data on key adult skills, namely literacy, numeracy and problem solving in technology-rich environments, which are considered to underlie the success of the individual, and in turn to contribute to the overall success of society.

1.2 Release of PIAAC results
Launch of the first results of the International report of the Survey of adult skills (PIAAC) will take place in Paris at 10am Irish time on 8th October 2013, with the launch of the National Publication on PIAAC taking place on the same day. All reporting of results is strictly embargoed before then.

1.3 How was PIAAC administered?
There were 24 national participants in PIAAC, comprising 20 OECD member countries, regional entities from two OECD member countries (UK and Belgium) and two partner countries (Cyprus and the Russian Federation). Although the Russian Federation also participated in PIAAC, its data was not ready for inclusion in the first international report on PIAAC. The tables for England and Northern Ireland are available separately. Comparison tables containing estimates for all participating countries are available within the OECD’s international report (OECD, 2013a) and public use datasets for all participating countries are also available online (http://www.oecd.org/site/piaac/surveyofadultskills.htm).

Following a field trial in the summer of 2010, the main PIAAC survey was administered in Ireland between August 2011 and March 2012 by the Central Statistics Office on behalf of the Department of Education and Skills. The sample of respondents was selected to be representative of the geographical distribution and socio-demographic characteristics of the population. Data was collected face-to-face by CSO interviewers in the homes of respondents using a mix of laptop computers and paper test booklets.

Each selected person who fully completed the survey received a gift voucher worth €30. Almost 6,000 adults (5,963) aged 16-65 responded to the survey in Ireland. The overall response rate for Ireland was 72% which was the third highest achieved by participating countries. Response rates varied across countries, four countries, including Ireland exceeding the OECD’s response rate target of 70% (Korea, Cyprus, Ireland, Australia), while four
countries (Denmark 50%, Japan 50%, Spain 49%, Sweden 45%) were either at or below the minimum response rate standard of 50% set by the OECD.

### Scale scores

Once the data was collected nationally, the performance of each respondent on the individual test items was analysed by Education and Testing Services (ETS) in the USA on behalf of the OECD. The ETS used a methodology to allow every respondent in the sample to be given a ‘scale score’ for each of the three assessment domains (literacy, numeracy and problem solving in technology-rich environments) representing his/her level of proficiency in that domain. The scores on each scale range from 0 to 500 and the overall performance of the population and subgroups within it are considered in terms of their average or mean score on each scale.

### PIAAC Proficiency Levels

Each of the assessment items were placed on a hierarchy based on the proportion of people who get each task correct. Essentially this represents the difficulty of the task. Within this hierarchy, groups of items that lie close together and share common characteristics are clustered and then scores on the scale can be aligned with specific groups of items. In this way the underlying construct (e.g. literacy) can be broken down into meaningful levels. Both the literacy and numeracy scales are broken down into five levels whereas the problem solving scale uses just three (Table 1.1).

#### Table 1.1

Benchmark levels for PIAAC Assessment Domains

<table>
<thead>
<tr>
<th>Level</th>
<th>Range of scale scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below level 1</td>
<td>0-175</td>
</tr>
<tr>
<td>Level 1</td>
<td>176-225</td>
</tr>
<tr>
<td>Level 2</td>
<td>226-275</td>
</tr>
<tr>
<td>Level 3</td>
<td>276-325</td>
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<tr>
<td>Level 4</td>
<td>326-376</td>
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<tr>
<td>Level 5</td>
<td>376-500</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Level</th>
<th>Range of Scale Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below level 1</td>
<td>0-240</td>
</tr>
<tr>
<td>Level 1</td>
<td>241-290</td>
</tr>
<tr>
<td>Level 2</td>
<td>291-340</td>
</tr>
<tr>
<td>Level 3</td>
<td>341-500</td>
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</table>

### Distribution of adults across the levels of literacy and numeracy proficiency

In assessing the distribution of all adults across the five levels of the literacy and numeracy scales it is necessary to take account of the proportion of adults in each country who did not respond to the survey for literacy-related reasons. This group were assigned a score of 85 for calculating an adjusted mean score, under the assumption that they have low levels of literacy proficiency. These participants are added to the bottom of the proficiency distribution (at or below Level 1). The mean scores in literacy and numeracy given in this document are adjusted scores, and the international comparisons are based thereon. The International Report contains both adjusted and unadjusted scores. The adjusted mean score provides a more complete picture of the skills of the adult population aged 16-65 in each country. In Ireland, because there was very little literacy-related non-response, the adjusted and unadjusted scores are very similar, with only a one point difference in both literacy and numeracy. This is the case with most participating countries. However, in some countries with higher levels of literacy-related non-response, the difference between adjusted and unadjusted scores is larger.

An adjusted mean score is not provided for the problem solving scale because problem solving is only asked of a subset of the full population who have some computer ability, and an estimate of the proficiency of this group is unaffected by literacy related non-response.

### Country average
The average reported in each table or graph is the average of the participating countries who are members of the OECD. The average excludes the scores of OECD partner countries, Cyprus and the Russian Federation who also participated in PIAAC. It is important to note that only 22 of the 34 OECD member countries participated in some way in this survey, so the average in the tables should be considered a study rather than an “OECD” average.

2. What were the Results for Participants in Ireland in PIAAC?

2.1 Literacy

*Literacy mean proficiency score*

Irish adults aged 16-65 achieved an adjusted mean score of 266 on the literacy scale, below the survey average score of 270. The adjusted mean score places Ireland 17th out of 24 participating countries, and in a group with Germany (267), Poland (267), Austria (266), Flanders (Belgium) (266) and Northern Ireland (265), whose literacy mean scores are not statistically different from that of Ireland. The adjusted literacy mean scores for England and Denmark lie just above this group at 270, while the scores of the United States (262), France (261) Spain (251) and Italy (249) are significantly lower than that of Ireland.

*At or Below Level 1 on Literacy Scale*

On average across the countries who participated in PIAAC, 16.7% of adults score at or below Level 1 for literacy proficiency, when literacy-related non-response is taken into account. Ireland has 17.9% of adults at this level (0.5% literacy-related non-response, 4.3% below Level 1 and 13.2% at Level 1), giving a rank of 15 out of 24 countries, and statistically not different from the study average. The proportion of Irish adults at or below Level 1 is also not statistically different from eight other countries, including England (17.8%), Poland (18.8%), Germany (19.0%) and Northern Ireland (19.6%). Japan (6.1%) and Finland (10.6%) had the lowest proportions of adults at or below Level 1.

In 1994 (IALS) 22\(^1\) of Irish adults were at or below Level 1 for literacy proficiency, whereas in 2011 (PIAAC) this figure was lower, at 17.9%, indicating an improvement. More information on IALS is in Section 4.1.

*Literacy – Levels 3, 4 and 5*

At the upper end of the literacy scale, across the PIAAC countries, on average half (50.0%) of adults score at Levels 3, 4 or 5, compared to 44.5% in Ireland. Ireland has statistically the same proportion at the upper levels of literacy proficiency as Northern Ireland (44.2%), Poland (44.7%), Austria (45.7%) and the United States (45.7%). Japan (71.1%) and Finland (62.9%) had the highest proportion of adults at Levels 3, 4 and 5.

2.2 Numeracy

*Numeracy mean proficiency score*

On the numeracy scale, Irish adults aged 16–65 achieved an adjusted scale score of 255 which, in statistical terms, was significantly below the PIAAC country average score of 266, and placed Ireland 19th out of 24 participating countries. The numeracy mean score for Ireland

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\(^1\) This is based on the rescaled IALS data produced by ETS (OECD) for PIAAC.
is not significantly different from the mean scores of Northern Ireland (255) and France (253),
but is significantly higher than those of Italy (246), United States (246) and Spain (245).
Japan and Finland scored the highest with 286 and 282 respectively.

**At or below Level 1**
Just over 25% of Irish adults score at or below Level 1 for numeracy compared to just over
20% (20.2%) on average across participating countries, when literacy-related non-response is
accounted for. This places Ireland 18th out of 24 countries, statistically not different from
Poland (23.5%), England (25.5%) and Northern Ireland (26.6%), but with a lower proportion
at this level than France, Spain, Italy, and the United States. Japan is the only country to have
less than 10% of adults at or below Level 1 on the numeracy scale.

**Numeracy - Levels 3, 4 and 5**
At the upper end of the numeracy proficiency scale 36.3% of Irish adults are at Levels 3, 4
and 5 compared to 46.8% on average across participating countries. From a statistical
perspective, the proportion of Irish adults at Levels 3, 4 and 5 is the same as that of Northern
Ireland (37.5%), France (37.3%) and the United States (34.4%) but larger than Italy (28.9%)
and Spain (28.5%).

**2.3 Problem Solving in a Technology-Rich Environment**

As this is the first time an assessment of this nature has been implemented as part of an
international assessment, a number of important caveats apply to the interpretation of the
results.

The problem solving domain only used 14 items compared to the literacy and numeracy
assessments which drew from a pool of 58 and 56 items respectively. For this reason the same
breadth of measurement as achieved for literacy and numeracy could not be achieved for
problem solving. This is also the reason why only three problem solving levels have been
established compared to five for the literacy and numeracy scales.

In some countries, including Ireland, sizeable proportions of the target population, despite
indicating some previous computer experience, opted not to take the assessment on computer.
As a result the problem solving in technology-rich environments results for some countries
are not representative of all those with computer experience. This, according to the OECD,
militates against the use of mean scores across countries to compare proficiency (OECD,
2013a), as the results are not based on equivalent or comparable national samples. For this
reason the OECD has used the percentages at the different levels of proficiency rather than
mean scores to compare countries.

**At or below Level 1 in problem solving in technology-rich environments**
Just over two-fifths (42.0%) of Irish adults score at or below Level 1 (29.5% at Level 1,
12.6% below Level 1) on the problem solving scale, which is the same as the country average
(41.7%). Ireland is in a group with six other countries with a similar proportion at this level,
including Finland (39.9%), Estonia (42.8%) and Sweden (43.9%). Of the 20 countries who
implemented the problem solving assessment, 14 had between 40% and 50% at or below
Level 1 on this scale. The country that performed highest on problem solving, Japan, had
27.3% of adults at or below Level 1 on problem solving scale.

**At Levels 2 and 3 of problem solving in technology-rich environments**
At the top end of problem solving proficiency 25.3% of Irish adults are at Levels 2 and 3
compared to 34% on average internationally. This is significantly more than Poland (19.2%)
but not statistically different from Northern Ireland (28.7%), Estonia (27.6%) or the Slovak Republic (27.6%).

3. Features of PIAAC Results

3.1 How significant are the differences in performance between participating countries?

In comparing the Irish data with that of other countries it is important to note that in general there is far less variation between countries than there is within countries. In commenting on the unadjusted scores the OECD has noted that:

“...the variation in proficiency between the adult populations in participating countries is relatively small. Most countries (19 out of 21) have [literacy] mean scores which differ by 21 score points or less and fourteen countries have scores within the range 267 to 276 (9 score points)” (OECD, 2013a)

While there are differences in mean scores between countries the overall spread of scores across countries is not that wide and there are far larger differences between various subgroups within countries. Although PIAAC non-response has been assessed by the OECD as minimal or low for most participating countries, the possibility of some biases cannot be ruled out. Caution should therefore be exercised and statistical differences may not necessarily be meaningful when drawing conclusions from small score point differences between countries or population groups.

Country average

The average reported in each table or graph is the average of the participating countries that are members of the OECD. The average excludes the scores of OECD partner countries, Cyprus and the Russian Federation who also participated in PIAAC. It is important to note that only 22 of the 34 OECD member countries participated in some way in this survey, so the average in the tables should be considered a study rather than an “OECD” average.

3.2 What do the levels mean in terms of participants’ abilities?

The national report contains descriptions of the tasks completed by those scoring at the various levels across the three domains. However, a particular issue with surveys of this type has been the common misconception that those at the lowest levels of literacy proficiency, typically Level 1 or below have little or no literacy skills or are ‘illiterate’. In fact the reading component tests administered as part of the PIAAC survey show that even at the lowest levels of literacy proficiency there are significant levels of reading skill.

For example, at Level 1 on the Literacy scale there are a set of tasks that respondents who score between 176 and 225 have a reasonably high probability (67%) of getting consistently correct. The characteristics of these tasks are described below (Table 3.1).

<table>
<thead>
<tr>
<th>Level Scale scores</th>
<th>Task descriptions</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Most of the tasks at this level require the respondent to read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. Some tasks may require the respondent to enter personal information onto a document, in the case of some non-continuous texts. Little, if any, competing information is present. Some tasks may require simple cycling through more than one piece of information. Knowledge and skill in recognising basic vocabulary, evaluating the meaning of sentences, and reading of paragraph text is expected.</td>
</tr>
<tr>
<td>(176 - 225)</td>
<td></td>
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</tbody>
</table>
The corollary of this is that as respondents whose scale score puts them at Level 1 face more difficult tasks from higher levels their probability of getting these items correct diminishes.

3.3 Achievement in PIAAC by Gender and Age

**Gender:**

**Literacy**
There is no statistical difference between the mean score of Irish males (268) and females (265) on the literacy scale, and this trend is the same across the majority of countries.

Similarly there are no substantial differences between proportions of Irish males and females across the levels of the literacy scale, with Level 2 showing the only noticeable variation where the percentage of females performing at this level is 4% higher than males (40% versus 36%).

**Numeracy**
Unlike literacy there is a statistically significant 12-point difference in the mean scores for males (262) and females (250) on the numeracy scale. This difference between males and females on numeracy is consistent with the trend in all participating countries where males score higher than females.

Across the proficiency levels this pattern is further supported by a significant difference in the proportions at the lower and higher ends of the numeracy scale. A fifth (21.9%) of males are at Level 1 or below compared with 28.5% of females, while 10.4% of males and 4.8% of females are at Level 4/5.

**Problem Solving in Technology rich Environments**
There is a statistically significant six-point gap between the mean scores of males (280) and females (274) on the problem solving scale. There is also a significant difference in the proportions of males (41.0%) proficient at Level 2 and 3 on the problem solving in technology-rich environment scale in comparison to females (34.4%). The international data contains a similar trend for problem solving with 36% of males compared to 32% of females at Levels 2 and 3 (OECD, 2013a).

**Age:**

**Literacy**
Adults aged 25-34 have the highest literacy mean score in Ireland (276), while adults aged 55-65 have the lowest literacy mean score (251). This mirrors the pattern across participating countries which shows a decline in literacy proficiency for older age groups. Internationally, there is a 29 point scale score difference between those aged 25-34 (284) and those aged 55-65 (255).

Consistent with this, greater percentages of adults in older age groups are found at the lower levels of literacy. For example, 27.8% of Irish adults aged 55-65 are at or below Level 1 compared to 12.9% of those aged 16-24. This compares to 24.5% of adults aged 55-65 who are at or below Level 1 internationally and 10.9% of those aged 16-24.
Numeracy
The relationship between age and numeracy is very similar to that of literacy. Adults aged 25-34 have the highest mean score for numeracy in Ireland (266), while adults aged 55-65 have the lowest numeracy mean score (238). This also mirrors the average trend across participating countries which shows a decline in numeracy proficiency for older age groups. Internationally, there is a 26 point average mean score difference between those aged 25-34 (279) and those aged 55-65 (253) on the numeracy scale, which compares with a 29 point difference found between the mean score of the same age groups for literacy.

Looking at the age breakdown of Irish adults who score at or below Level 1 on the numeracy proficiency scale, 22.9% of those aged 16-24 are at this level compared to 18.8% of those aged 25-34 and 36.4% of those aged 55-65.

This compares to 16.1% of those aged 16-24, 14.2% of those aged 25-34 and 27.6% of those aged 55-65 who are at or below Level 1 on average across countries.

Problem Solving in Technology rich Environments
The highest problem solving mean score in Ireland is achieved by those in the 20-24 age group (288) while the lowest is achieved by those aged 60-65 (247). Mean scores for those aged between 16 and 34 are quite similar but gradually decrease for older age groups.

In general those aged under 34 in Ireland have the highest proportions at Level 2 and Level 3 on the proficiency scale for problem solving in technology-rich environments. For example, almost 50% of those aged 20-24 are at Level 2 or 3. This mirrors the average trend across participating countries where 50.7% of people aged 16-24 score at Level 2 or 3 but just 24.0% aged 55-65 score at the same level (OECD, 2013a). At the other end of the scale those aged 55-59 (82.9%) and aged 60-65 (88.3%) have the highest percentages at Level 1 and below.

4. HOW DOES IRELAND’S PERFORMANCE ON PIAAC COMPARE WITH PREVIOUS STUDIES?

4.1 IALS

In 1994 the International Adult Literacy Survey (IALS) was conducted in Ireland by the Educational Research Centre, St. Patrick's College, Drumcondra (Morgan et al. 1997). The use of common or so-called linking items in the IALS and PIAAC surveys and IRT methodology allows the results of both surveys to be compared in a general but meaningful way.

Although the target populations for both surveys were identical (i.e. non-institutionalised persons aged 16-65) and both measure ‘literacy’, it is not possible to directly compare the IALS data published in 1997 with the new PIAAC data and a number of technical adjustments of the IALS data were required.

Firstly, the IALS survey collected data for three individual literacy dimensions (prose, documents and quantitative literacy), while PIAAC measured literacy as a single, unified domain. For comparability purposes the IALS data for the prose and documents scales have been combined by the OECD into a single IALS literacy scale. The IALS quantitative literacy data was not used in comparisons between IALS and PIAAC.

Secondly, because there now exists a lot more information about the items that were initially used in IALS and subsequently used in ALL and PIAAC, it was possible to produce more accurate literacy estimates for IALS. Importantly, this ‘rescaling’ process has slightly changed
the IALS results for all participating countries. Previously IALS (1997) reported that 25% of Irish adults were at or below Level 1 in 1994 while the newly scaled data (based on best current information) now puts this figure at 22%.

There are a number of things to bear in mind when comparing the IALS and PIAAC literacy results for Ireland.

- IALS had a much smaller sample size (2,439) than PIAAC (5,963), and had a lower overall response rate (60%) than PIAAC (72%).
- In IALS the assessment was exclusively carried out on paper booklets, whereas PIAAC used a combination of paper and computer based assessments.
- Through the inclusion of an assessment of ‘reading components’ PIAAC provides considerably more information about the skills of weaker readers than has been previously available.
- There was considerable variation in the survey execution of IALS across countries to such an extent that it has been argued that international comparisons based on IALS data should be interpreted with caution (OECD, 2013a). On the other hand, PIAAC has been described by the OECD as one of the most closely monitored and controlled surveys of its type, notwithstanding the large variations in response rates across countries.
- There are just nine items common to the IALS and PIAAC literacy assessments, so although there is a link, it is not very robust.

**Levels of literacy scale**

In six of the countries that participated in both IALS and PIAAC there has been an increase in the percentage of their adult populations who scored at the lowest levels (at or below Level 1) of the literacy scale: Denmark (+8.6%), Germany (+8.2%), Norway (+5.0%) and Sweden (+3.1%). On the other hand, in eight countries the percentage of adults 16-65 at or below Level 1 has fallen, including Ireland (-4.6%). Poland had the largest reduction in the percentage of adults at the lowest levels of literacy, a drop of 22.4% from 41.1% in IALS to 18.8% in PIAAC.

At the other end of the literacy scale, 12 of the 15 countries who participated in both surveys had a drop in the percentage of adults at Levels 3, 4 and 5. Denmark (-16.1%), Norway (-15.1%) and Sweden (-10.6%) had the largest reductions, while Ireland had a very small reduction of just under 1%. Only two countries, Poland (+20.7%) and Australia (+6.7%), recorded a significant increase in the proportion of adults at the top end of the literacy scale.

**Overall mean score comparison and distribution across levels**

While the difference between the overall literacy mean score of PIAAC (267) and IALS (264) is not statistically significant, the percentage of adults at or below Level 1 has fallen by 5%, from 22% in 1994 to 18% in 2012. There are also no statistical differences between the scores of males (264 versus 268) and females (265 versus 265) across the two surveys.

IALS found 32.2% to be at Level 2 while PIAAC found 37.7%. At the upper levels of the literacy scales (3, 4 and 5) the proportions of adults were quite similar, if slightly higher in PIAAC (IALS: 45.7% and PIAAC: 44.7%).
Overall, this indicates that there has been a general improvement in the literacy proficiency of the Irish adult population, with proportionally fewer at the lower levels of proficiency and a greater percentage at levels 2 and 3.

4.2 PISA

The Programme for International Student Assessment (PISA) is another OECD international survey regularly conducted in Ireland which has as its objective the assessment of how well students at age 15 are prepared to meet the challenges they may encounter in future education and life. The PISA assessment began in 2000 and is conducted in three-yearly cycles. Ireland has participated in all rounds of PISA to date – 2000, 2003, 2006, 2009 and 2012. PISA results for 2012 were not available for inclusion in this report and are scheduled for publication in December 2013.

Despite some similarities, there are significant differences between the surveys, in particular their target populations, data collection processes and assessment design. It is difficult to reconcile the performance of 15-year olds on the PISA assessment with the performance of the equivalent age cohorts on PIAAC. Although there is not a strong basis for comparing the results of the two surveys, particularly since there are no items common to the two assessments, it might be expected that PISA would broadly predict performance on PIAAC even allowing for some change in proficiency in the years since the PISA assessment was carried out and changes in the composition of each cohort.

However this is not the case in many countries including Ireland, where the level of PIAAC performance in literacy and numeracy is different to that found on PISA, notwithstanding the fact that PIAAC and PISA have defined proficiency levels or performance benchmarks differently from one another. Consequently caution must be exercised when drawing conclusions from these comparisons. Secondary analysis will be needed to better understand how the results of PISA and PIAAC compare with one another.

5. Key Facts on Literacy and Numeracy Provision

5.1 Early childhood, primary and post primary

The Minister published *Literacy and Numeracy for Learning and Life; the National Strategy to Improve Literacy and Numeracy Among Children and Young People 2011-2020* in July 2011. The Strategy addresses following six key areas aimed at improving literacy and numeracy outcomes:

- Enabling parents and communities to support children's literacy and numeracy development;
- Improving teachers' and early childhood education and care practitioners' professional practice through changes to both pre-service and in-service education;
- Building the capacity of school leadership to lead improvements in the teaching and assessment of literacy and numeracy in schools;
- Getting the content of the curriculum for literacy and numeracy right at primary and post-primary levels by making sure that the curriculum is clear about what we expect students to learn at each stage;
- Targeting available additional resources on learners with additional needs, including students from disadvantaged communities, students learning English as an additional language and students with special educational needs;
Improving how teachers, schools and the educational system use good assessment approaches to plan the next steps for each learner and monitors progress.

Each of the actions in the Strategy has a timeline and clear lead responsibility for delivery is assigned.

A full progress report on implementation will be issued in the coming months but since its publication there has been significant progress under many of the 41 actions and almost 180 sub-actions. Some highlights are set out below.

**Early Childhood**

- The National Council for Curriculum and Assessment has worked intensively with a small number of early years services to develop Aistear-in-Action, which is a toolkit for early years providers implementing the early years curriculum.
- The Department of Children and Youth Affairs are committed to incentivising state-funded early childhood care and education practitioners to engage in continuing professional development to enhance their ability to use a range of assessment for learning and assessment of learning.
- Minister Fitzgerald has announced an upskilling requirement for the sector that all pre-school leaders will have to have a minimum of a NFQ Level 6 Major Award by 2015 and that any assistants have to have a minimum of a Level 5 qualification. The Common Award Standards developed for Level 6 have a Literacy and Numeracy module which will be a mandatory component for State funding. There is also a mandatory component on curriculum.
- Pilot joint Department of Education and Skills Inspectorate/HSE evaluations of early childhood care and education provision have been undertaken. Material on transitions from pre-school to primary school has been developed and tested as part of a National Early Years Access Initiative. It has been welcomed by the primary schools. Exploratory work is taking place to see whether this can be mainstreamed.

**Teacher Education**

- A team of literacy and numeracy advisors has been appointed to support teachers and schools in implementing the Strategy and a national programme of professional development for primary and second level teachers is underway.
- Proposals on revised entry standards, in relation to mathematics, for initial teacher education have been incorporated into the Teaching Council's Initial Teacher Education: Criteria and Guidelines for Programme Providers. The criteria also provide for an expansion of the primary Bachelor of Education from 3 to 4 years, and for an expansion of the Professional Diploma in Education to 2 years. The lengthened and reconfigured Bachelor of Education programmes began in the primary colleges of education in September 2012.
- Units on literacy and numeracy have been developed within the National Teacher Induction Programme.
- All schools have been invited to nominate a link teacher for both literacy and numeracy. Link teacher seminars (English and Irish-medium schools) were provided through the Education Centre network. Literacy and Numeracy Link clusters emerged
from this process and provide a forum for ongoing development and support and with a view to forming link-teacher learning communities. Seminars for Link teachers in special schools have also been provided.

- A one day seminar for school leaders in all schools was provided in 2012/13, focusing on school self-evaluation as a process with practical application in the areas of literacy and numeracy. Further seminars for school leaders in 2013/14 are planned with workshops to again focus on specific areas such as data analysis and target setting.

- By the end of the 2012/13 school year, all post primary English and Irish subject teachers had been offered an opportunity to access further CPD.

Assessment

- In the four years from 2012/13 to 2015/16, schools will be asked to evaluate the quality of teaching and learning in literacy, numeracy and at least one other curriculum area in the context of school self-evaluation.

- Since the 2011/12 school year, primary schools have been required to:
  - Introduce a third point of standardised testing in English reading and Mathematics, so that pupils are tested at the end of 2nd, 4th and 6th class. Irish medium schools are asked, in addition, to also test students in Irish reading.
  - Report the results of the tests to parents as part of an overall standardised report on their children's learning,
  - Report the results, in terms of the numbers scoring at particular percentile bands, to the Department and the school board of management,
  - Provide data on 6th class pupils' progress to their second level school once enrolment has been accepted.

Curriculum

- Since the 2011/12 school year, primary schools have been required to increase the time spent on mathematics by 70 minutes per week and increase the time spent on literacy by one hour per week.

- The National Council for Curriculum and Assessment is currently developing an integrated language curriculum for primary schools. While the focus of this curriculum will be on English and Irish, the integrated approach should help children to transfer skills acquired in one language to other languages. Work is also beginning on looking at the primary mathematics curriculum.

- Under the Framework for Junior Cycle (launched October 2012), literacy and numeracy are identified as skills which all students must have; this aims to develop an integrated approach to promote the development of literacy and numeracy skills across the curriculum. In addition the recasting of English and Irish syllabuses has been prioritised with English being the first new syllabus to be introduced in schools in September 2014 and Irish following with the second wave of subjects in September 2015.

Information and Publicity
The National Adult Literacy Agency (NALA) has developed a website www.helpmykidlearn.ie for parents of children up to 12 years of age. The website provides a range of practical information and activities for parents to help their children’s literacy and numeracy development.

NALA’s Family Project TV Programme showcased the educational tools and techniques that are available to all families. The programme was a six-part series that followed families from around Ireland working together to overcome educational issues that affect their lives. The programme teamed up six well-known and inspirational people with six very different families. It ran on RTE 1 television in May and June of 2013.

5.2 Dedicated adult literacy provision

The Adult Literacy Service

The Adult Literacy Service is funded by the Department of Education and Skills and is delivered by Education and Training Boards nationwide. It is focused on those with low levels of literacy skills and includes basic education services and English language tuition. In addition to reading and writing, adult literacy covers numeracy, social and personal development, learning to learn and IT skills. The adult literacy service is free and confidential.

Adult Literacy is available as a stand-alone tuition programme in a variety of formats (intensive, family and workplace) and for specific cohorts (deaf people, people with dyslexia and native Irish speakers in Gaeltacht areas). It is delivered on a one-to-one and group basis, in classrooms or outreach or other atypical settings, for between 2 and 6 hours weekly up to 40 weeks annually.

The Adult Literacy Service is delivered according to Operational Guidelines issued to ETBs (then VECs) in February 2012. These Guidelines were drafted in co-operation and collaboration with stakeholders and are targeted at ETB staff managing, administering and delivering adult literacy programmes funded by the Department of Education and Skills.

Funding and Participants

Adult Literacy Programme

Annual funding for adult literacy increased from €1 million in 1997 to €30 million in 2012. Funding has been at the level of €30 million since 2007. The total spend on adult literacy since 2000 has been in the region of €300 million.

The annual number of participants has increased from 5,000 in 1997 to over 57,000 in 2012 and total participant numbers availing of adult literacy programmes since 2000 is over half a million participants, including over 100,000 availing of English language tuition.

NALA also developed an interactive website www.writeon.ie that allows adults the freedom to study in their own time to improve their reading, writing and number skills and get a national qualification. Almost 30,000 learners have accessed the website.

In 2012, over 2,600 people in employment completed courses in literacy and basic education through the Skills for Work Programme at a cost of €2.8 million.
In 2013, targets of 20% and 25% of participants were set for participation by long term unemployed people in the Adult Literacy Programme in 2013 and 2014 respectively. The targets set for ESOL provision are 25% and 30% in 2013 and 2014 respectively.

**Review of Adult Literacy Provision**

A review of adult literacy provision began in late 2012, at the request of the Department of Education and Skills, with the aim of informing and developing future policy in relation to Adult Literacy provision. The report of the review group was published in September 2013. The Report makes recommendations, 32 in total, to develop and enhance provision to enable services to meet the current and future needs of learners, employers and Government.

The Report addresses the level and nature of provision recommending more intensive options, group tuition, numeracy tuition, family literacy, distance and blended learning options. There are also recommendations addressing areas such as assessment of learners, availability of accredited options, identifying learners including the unemployed, the integration of literacy in other programmes and the training of staff.

The Department accepts the findings of the Report and has begun the process of addressing the recommendations contained in it. As an initial step the Adult literacy Operational Guidelines will be revised to incorporate many of the recommendations. Implementation will continue through the Further Education and Training Strategy, which will be developed by SOLAS.

**5.3 Core Skills in Further Education and Training**

While the Adult Literacy Service is a key component of the further education and training system, there is also a significant focus on literacy and numeracy elsewhere in other programmes. All learners in further education and training need to continually focus on their generic and subject-specific literacy and numeracy skills and this is an important element of further education and training programmes.

**Common Awards System (CAS)**

The majority of further education provision leads to the awards of Quality and Qualifications Ireland (QQI) and programmes are developed to meet award specifications. The QQI Common Awards System (CAS) focuses on ensuring that in each CAS major award a recognisable and appropriate volume of credit is assigned to:

- the vocationally specific area,
- a generic pool of transferable skills
- a work related pool.

Generic Minor Awards became a mandatory feature of all QQI-FETAC Major Awards, including apprenticeship. These Generic Minor Awards include a range of core competencies including Team Working, Personal Effectiveness, Communications, Mathematics and Problem Solving and must equate to at least 15% of the overall Major Award. This means that there is a strong literacy and numeracy dimension to all mainstream further education and training provision.

**Integrating Literacy and Numeracy**

As well as the focus on literacy and numeracy required to meet the standards of awards to which programmes lead, a range of programmes and initiatives specifically designed to build literacy and numeracy skills in broader settings have been developed.
Literacy tuition is available as part of the Vocational Training Opportunities Scheme (VTOS) and the Back to Education Initiative (BTEI). Under the co-operation hours scheme, literacy tuition is provided by ETB-employed staff in Community Training Centres and prisons as well as in the National Learning Network (NLN), centres for the unemployed, Vocational Training Centres (VTC) and day care centres.

FÁS offer literacy and numeracy support and development for people with disabilities in Specialist Training Provision (STPs) and disadvantaged people in Local Training Initiatives (LTIs) who are unemployed and unable to access other FAS training provision. These programmes address the personal, social and vocational training needs of learners who are offered training leading to awards ranging from Level 3 to Level 5 on the National Framework of Qualifications.

Guidelines for staff on “Developing basic literacy and numeracy skills in Youthreach and Community Training Centres“ have been completed and will be available on the Department’s website shortly. These guidelines for staff on best practice in teaching basic literacy and numeracy skills to learners were developed as part of the Department’s prioritisation of literacy and numeracy development. Two specific literacy and numeracy initiatives have been implemented in CTCs over the past 2-3 years. A series of eight Integrating Literacy programmes for 146 CTC personnel was completed in March 2013 as part of continuing professional development provision and offers participants a Level 7 NUIM certificate. A further programme for 38 CTC Managers will be provided later this year which is designed to enable a whole centre planning approach to integrated literacy and numeracy in CTCs. In addition, a specific initiative provided additional funding over the past two years to support CTCs which are experiencing difficulties in resourcing literacy and/or numeracy provision. This additional literacy and numeracy support provides for individual and/or group tuition for learners in CTCs requiring extra support to work towards QQI Awards.

Through the Back to Education Initiative, a Level 3 integrated curriculum document has been developed on Ireland Today. The document sets out a curricular framework for the implementation of a NFQ Level 3 Foundation Programme on a phased basis leading to a full level 3 QQI award in General Learning. The programme is designed to be delivered on a part time basis over 2 years and provides adults with an opportunity to develop comprehensive literacy and numeracy and ICT skills through participation in an integrated programme, with a focus on progression to levels 4 and 5 of the NFQ.

The FÁS eLearning at the Library Programme is a joint programme between FÁS, the Library Council of Ireland and the network of libraries in Ireland. The aim of the Programme is to equip the learner with the knowledge and basic concepts of information technology and the skills and competence required to operate a computer with priority given to people who are on the Live Register and from other identified target groups. This Programme offers a QQI Minor Award in Computer Literacy at Level 3 on the NFQ and is delivered flexibly, running at various times to suit client needs e.g. mornings, afternoons, evening and Saturdays for 32 hours, delivered over a 16 week period. In 2012, 1,715 learners participated in the Library Programme.

FÁS also delivers a wide range of skills training courses through its network of Training Centres and contracted training providers. These training courses concentrate on technical skills and generic skills (e.g. communications, team-working, career planning) that meet employers’ demand (market-led), learners’ needs (client-led) or are primarily developed and offered to provide bridging or foundation-type training coupled with other supports that facilitate access by learners to a mainline market-led course.
Under the Momentum programme, *Write On – Personal Pathways to Employment* aims to assist individuals under the age of 25 with assistance in getting back to work while simultaneously obtaining QQI-FETAC qualifications at Level 3 on the National Framework of Qualifications (NFQ). The learning on the programme is web-based with tutor support. A jobs mentor is also assigned to provide job placement support. Sixty (60) individuals will be trained under this initiative.

*Future Directions*

The further education and training landscape is undergoing a major transformation. 16 new Education and Training Boards (ETBs) were established on 1 July 2013 to replace the 33 former Vocational Education Committees. The ETBs will also take on the training functions of FÁS, enabling the integrated delivery of further education and training, including literacy and numeracy provision, at local and regional level.

The upcoming establishment of SOLAS will provide strategic direction for the reforms of planning and delivery of further education and training. Central to this will be the production of a comprehensive 5 year further education and training strategy. SOLAS’ governing legislation specifically provides that the overall strategy includes a comprehensive strategy for the provision of programmes aimed at promoting, developing and encouraging literacy and numeracy. This will ensure that the good work that is happening throughout the country in this area is more focused, co-ordinated and effective.

SOLAS will be established in the near future and the further education and training strategy will be completed in Spring 2014.

### 5.4 Core Skills development in employment

*Skillnets*

Skillnets provide literacy and numeracy training to their networks of members under Theme 4 (Enhancing the general competency skills of the lifelong learner) of their annual funding applications process. There is a focus on essential reading and writing skills, interaction and social skills, communication in foreign languages, mathematical competence, basic competencies in science and technology and digital competence under this provision. Many networks will also work with member companies to refer individuals to local ETBs for support.

*Skills for Work*

The Workplace Basic Education Fund is managed by the Department and funding is provided from the National Training Fund. Skills for Work aims to improve literacy and numeracy skills through the provision of training to help employees deal with the basic skills demands of the workplace. Annual funding has been maintained at €2.8m in recent years. The tuition includes literacy and numeracy and covers a variety of subjects such as communications, computer training and interpersonal skills. In 2012, 2,684 people completed SfW courses.