Literacy Impact

An Outcomes Framework for measuring the impact of improved literacy, numeracy and digital skills

#LiteracyChangesLives

NALA

National Adult Literacy Agency
Áisíneacht Náisiúnta Litearthachta do Aosaigh

About this report

The aim of this research report is to identify indicators to measure the outcomes of literacy strategies and initiatives in Ireland.

The report:

- presents outcomes in an Outcomes Framework structured around eight domains;

- proposes sample indicators that could be used to measure evidence of impact against these outcomes;

- identifies opportunities for gathering data to provide evidence against the outcomes and identifies possible tools for measuring outcomes;

- makes recommendations for how such an Outcomes Framework could be featured in a new Whole-of-Government strategy; and

- identifies opportunities for embedding literacy, numeracy and digital skills-related outcomes and indicators in strategies in other policy areas.

The report was written by Jackie Borge (Borge Consulting) and Daniel Sellers.

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Section 1
Introduction

Background

The Organisation for Economic Cooperation and Development's (OECD) **Survey of Adult Skills** demonstrates that Irish adults with low literacy, numeracy and digital skills earn less income, have poorer health and are more likely to be unemployed, which has devastating consequences and costs for individuals, communities and the economy.[1] The same survey found that one in six Irish adults between the ages of 16 and 64 finds everyday texts hard to understand, and one in four struggles with everyday maths. This means that a sizeable proportion of the Irish population is likely to be experiencing poor outcomes across multiple areas of their lives.

NALA's Strategic Plan 2020-2022 sets an ambition to begin a discussion with government, grounded in research, on the benefits of a Whole-of-Government approach to adult literacy, numeracy and digital skills. NALA acknowledges that a number of government departments, state agencies and national policies already identify and commit to improving levels of literacy, numeracy and digital skills for adults, but is now seeking "better coordinating, sharing and aligning of initiatives to improve adult literacy, numeracy and digital skills."[2]

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1   As quoted in Literacy for Life (NALA, 2020).
2   NALA Submission to the FET Strategy Consultation (NALA, 2019).

Aim of this report

In July 2019, NALA commissioned Jackie Borge, Borge Consulting and Daniel Sellers, Education Consultant, to undertake a research project to "identify indicators to measure the outcomes of adult literacy strategies and initiatives in Ireland."[3]

This report presents the project's findings and makes recommendations. It:

- acknowledges the breadth and depth of evidence from research about the impact of improved literacy, numeracy and digital skills on different areas (or domains) of learners' lives (for example, health and wellbeing) and on society and the economy;

- presents outcomes in an Outcomes Framework, structured around eight domains;

- proposes sample indicators that could be used to measure evidence of impact against these outcomes;

- identifies opportunities for gathering data to provide evidence against the outcomes and identifies possible tools for measuring outcomes;

- makes recommendations for how such an Outcomes Framework could be featured in the new Whole-of-Government strategy; and

- identifies opportunities for embedding literacy, numeracy and digital skills-related outcomes and indicators in strategies in other policy areas.

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[3]   Invitation to quote (NALA, 2019).

Structure of this report

Section 2 provides an account of how we went about producing the Outcomes Framework, and the sources of data and expertise we drew on.

In **Section 3** we acknowledge the breadth and depth of evidence in international research relating to the impact of improved literacy, numeracy and digital skills on multiple areas of learners' lives — and for society and the economy in general.

We make the case for a set of domains for measuring impact and set out what we believe can be key, high-level outcomes for each domain; we show these outcomes within a diagrammatic Outcomes Framework.

At the end of this section we offer a set of sample indicators that could be used to measure progress against the outcomes in the Framework.

Section 4 provides a discussion, based on research evidence, about the complexity of measuring the wider outcomes of adult literacy, numeracy and digital skills. It provides a set of guidelines for what research suggests makes for effective measurement of outcomes. It then describes a spectrum of measurement methods, recognising the place and validity of **soft** measures based on learner statements, as well as on **harder** measures such as cost benefit analyses — and a number of measures in the middle.

In **Section 5** we set out recommendations for NALA on how to use the Outcomes Framework to strengthen their work to establish a Whole-of-Government adult literacy, numeracy and digital skills strategy.

A number of appendices provide diagrams, tables and further information to illustrate aspects of our findings.

The language of measuring impact

There are a number of terms used to talk about the difference that learning (or any type of public policy intervention) can make for individuals, for the people and communities around them, and for society and the economy at large.[4] We clarify our use of some key terms, as follows:

Impact

The word **Impact** is often used as a catch-all term to talk about difference made, and is likely to use generalised language, for example:

Learning can have a positive impact on an individual's health.

Benefit

The term **Benefit** is used to talk about any positive difference that is made is. This word is often used to describe general changes, differences or achievements, and can refer to differences made at any level (for the person or for society) and will not usually be written using a particular language format. For example:

Learning can have a number of benefits, including better health, more confidence and an interest in further learning.

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4   Adapted from Evidencing the Impact, Learning Link Scotland, 2015.

Outcome

An **Outcome** is a specific and more measurable difference made. It uses language that describes a difference achieved in a way that can be measured. It often answers a "so what?" question. For example, in a situation where a six-month job skills course was funded by an ETB, an outcome might be:

> Participants have gained jobs as a result of attending the course.

Indicator

An **Indicator** is the specific measure or target used to identify whether an outcome has been achieved, or partially achieved. Indicators should be specific and measurable. Examples of indicators include:

- achievement of qualifications (which could be measured using qualifications data);

- demonstration of new skills (which could be observed and attested to by a tutor); or

- the learner saying they feel more confident about their new skills (which could be evidenced by learner testimony in a conversation, focus group or survey response).

Indicators can be **hard** or **soft**. Hard indicators include:

- recording of attendance (using a registration system); or

- achievement of qualifications (using qualifications data).
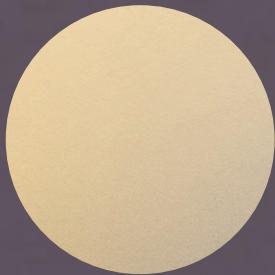
Hard indicators often use numerical data and sometime include targets (for example, "90% of learners who started the course completed it" or "75% of course participants achieved a certificate at QQI level 2.")

Soft indicators tend to use qualitative data, based on learner statements, feedback to surveys or pieces of research, or focus groups.

Section 2
Methodology

Collation of data

NALA supplied us with a number of documents including, principally, a set of thematic papers it had commissioned. These papers focused on recognised areas of life (or domains) where literacy, numeracy and digital skills have been recognised and evidenced to make a difference. These papers made references to several sources of evidence, and we identified further papers to review and analyse.

NALA also asked us to make contact with a number of recognised international experts in the fields of adult literacy, numeracy and digital skills, and in adult learning and the measurement of impact.

Analysis of data

To assist us in our review of a vast quantity of research evidence, and policy and other documentation, we created an analysis framework. We used this to identify and extract relevant information about the outcomes, indicators and wider impacts of learning contained within the papers.

We reviewed a total of 96 documents and resources. We identify these in the bibliography and, where appropriate, reference individual documents in footnotes throughout this report.

Consultation with international experts

We carried out semi-structured interviews with six international experts. We sought their views on effective measures of wider outcomes of adult literacy, numeracy and digital skills and requested signposting to further research evidence.

These experts were:

- John Benseman, Programme Evaluator and Adult Literacy Specialist, New Zealand

- John Comings, Senior Technical Consultant, World Education, USA, and Adjunct Faculty Member at the Center for International Education at the University of Massachusetts

- Graciela Sbertoli, Secretary General, European Basic Skills Network

- Alex Stevenson, Head of English, Maths and ESOL, Learning and Work Institute, England

- Prof Lyn Tett, University of Huddersfield, England, and University of Edinburgh, Scotland

- Coleen Willoughby, Learning Manager, Glasgow Life, Scotland

We thank them for their time and acknowledge their experience and expertise. Their insights and guidance helped us immensely in identifying further rich sources of evidence and gave us inspiration as we crystallised our ideas in developing the Outcomes Framework and sample indicators.

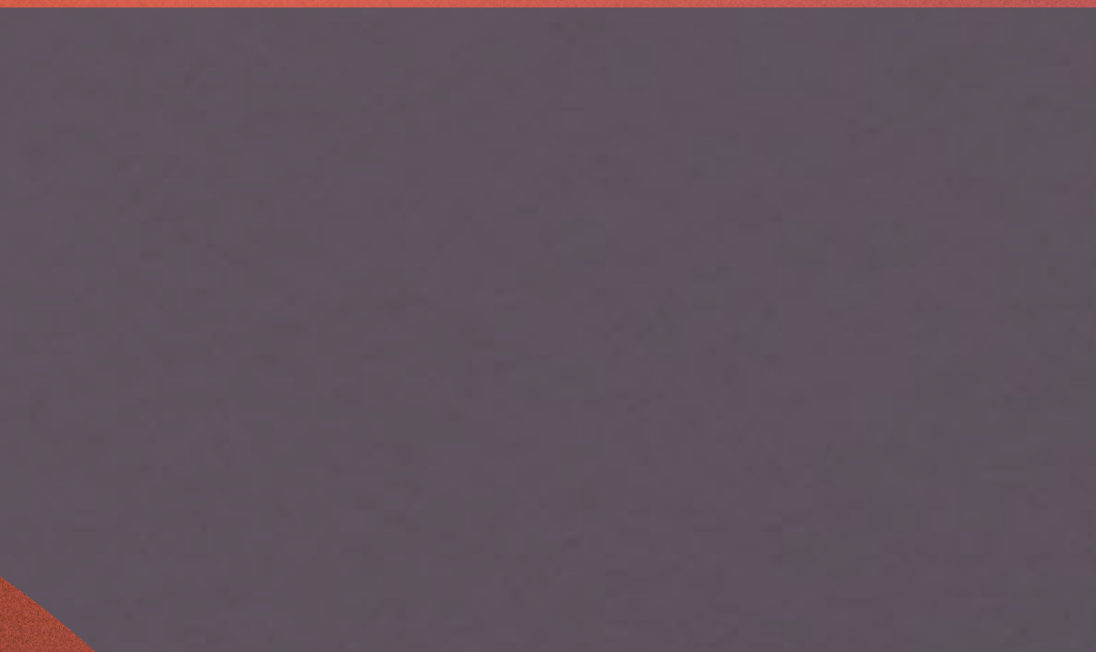# Identifying domains, outcomes and sample indicators

In Section 3 we describe how we drew on the research evidence to identify domains and create outcomes and sample indicators.

Outcomes Framework for adult literacy, numeracy and digital skills for Ireland
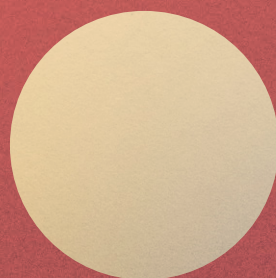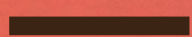
The benefits of improved literacy, numeracy and digital skills

The benefits[5] of having higher literacy, numeracy and digital skills are well evidenced in global research and are collated in thematic papers produced or commissioned by NALA in 2018-19.[6] Our review[7] of these and other research reports and documents has informed our identification of **domains**, **outcomes** and sample **indicators**.

Often benefits are identified as correlations, drawing on data from large-scale research exercises.[8] There are also examples, often evidenced by longitudinal pieces of research, where a **causal** link can be identified between improved skills and an impact in other areas of life. One of the domains that has most evidence of increased skills leading to increased outcomes is the domain of health and wellbeing.[9]

Categories of outcomes

Based on our research findings, we propose that the outcomes of improved adult literacy, numeracy and digital skills be clustered in three broad categories:

a. educational (referring to benefits for the individual);

b. life-wide (for the individual and those around them); and

c. economic and societal (for the country or population at large).

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5   See Appendix B.

6   Literacy Matters for health and wellbeing (Gibney, 2019); Literacy Matters in social and community life (Byrne and Ó Riain, 2019); and Background Report on Family Literacy Practices in Irish Education and Training Boards (Hegarty and Feeley, 2020).

7   See Bibliography for the full list of research and other papers we reviewed.

8   For example, the Programme for the International Assessment of Adult Competencies (PIAAC).

9   Literacy Matters for health and wellbeing (Gibney, 2019).

a)   Educational outcomes

These outcomes relate to the learner's knowledge and skills, particularly to their literacy, numeracy and digital skills. The outcomes also relate to the learner's personal development as a resilient, critical, autonomous learner with aspirations and capacity to plan, learn and develop further.

b)   Life-wide outcomes

These are outcomes for the learner and outcomes for people around the learner, including members of their families and communities. The outcomes relate to areas of the learner's life where they use their new capabilities to:

- improve their lives (for example, their health and wellbeing);

- engage in activities; and

- further their aspirations (for example, in terms of work).

c)   Economic and societal outcomes

These are high-level outcomes relating to economic productivity, democratic engagement, engagement in environmental concerns, and reduced crime.

Identifying domains

We propose that outcomes should be clustered around themed domains. The domains we propose reflect long-recognised themes for understanding the wider benefits of adult literacy, numeracy and digital skills, and of adult learning in general. However, recent research shows there is some divergence in thinking, and it is possible to formulate arguments for and against particular outcomes being understood to sit within one domain or another. The eight domains we have identified are:

Table 1: Outcomes categories and domains

Outcomes category	Domains
Educational	› Learning and Personal Development
Life-wide	› Family and Intergenerational › Community Life and Social Inclusion › Health and Wellbeing › Work › Financial Capability
Societal and Economic	› Society and Citizenship › Economy

Learning and Personal Development

We have proposed a single broad domain called **Learning and Personal Development**. This domain includes outcomes relating to:

- the acquisition of literacy, numeracy and digital skills;

- wider personal development (for example, relating to confidence or the capacity to make decisions, or set learning or life goals); and

- the learner's development as a lifelong learner with increased capacity and capability to continue to learn.

Family and Intergenerational

Outcomes for learners' families have long been recognised. We propose a domain focusing on outcomes of improved literacy, numeracy and digital skills for the family. We recognise that outcomes are not always just for children but are also for partners, spouses and wider family members, and are often fundamentally about the family placing more value on education as a whole. We have proposed a domain called **Family and Intergenerational.**

Community Life and Social Inclusion

In relation to outcomes relating to learners' social and community lives, we recognise that PIAAC seeks data about the areas of 'social trust', 'civic volunteering' and 'political efficacy'.

NALA's thematic paper in relation to social and community life reminds us of the way in which the process of learning in itself (when it is group-based) can provide social contact and a sense of community. Our wider reading, and the interviews we carried out with the experts, reinforced the importance of highlighting the concept of 'social capital', whereby learners can form new relationships and networks in their community and in society more widely.

For the purposes of the Outcomes Framework we have proposed a domain called **Community Life and Social Inclusion**. Outcomes within this domain relate to the learner's engagement in their community (whether a geographical community or a community of interest) and also how socially included they feel. Based on our research, we propose that volunteering should sit within this outcome, though there are persuasive arguments for it being related to employment, as a means of developing work skills.

Health and Wellbeing

One area where thinking appears to be evolving is around the concept of **wellbeing**. Wellbeing has traditionally been understood as sitting alongside **health** and encompassing mental and emotional health. There is an argument for understanding wellbeing as an outcome of personal development.

Fujiwara[10] goes further, suggesting that wellbeing can be a longer-term outcome of improvements in a number of other areas of life. He argues that adult learning improves outcomes relating to health, employment, social relationships and voluntary work, and that these outcomes together indicate wellbeing.

Fujiwara's arguments are persuasive and remind us that causal relationships are often two-way or circular. Improved outcomes in relation to a person's working life can contribute to their wellbeing. And their improved wellbeing can in turn contribute to their confidence to better themselves, to learn and develop more, and to continue to improve outcomes in their working life.

Within the Outcomes Framework, we decided to keep wellbeing aligned to health, within a domain called **Health and Wellbeing**.

Work and Financial Capability

Research relating to employment outcomes from improved literacy, numeracy and digital skills, or to skills development in general, often merges outcomes for the individual with those relating to business productivity and for the economy as a whole.

Also, the research often aligns outcomes of improved financial circumstances or improved financial capability closely with employment outcomes on the basis that new or better employment often means a person earns more money. However, financial capability can also include a range of skills, knowledge and understanding; for example: better budgeting skills, understanding the way money works in society, and knowing where to get help when money troubles arise. We have separated outcomes relating to employment and to financial capability into two different domains: **Work** and **Financial Capability**.

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10   Valuing the Impact of Adult Learning: An analysis of the effect of adult learning on different domains in life. National Institute of Adult Continuing Education (England and Wales).

Society and Citizenship

We have broadened the domain relating to societal outcomes to include citizenship and have called it **Society and Citizenship**. Within this expanded domain we include an outcome relating to democratic engagement.

Economy

We have identified economic outcomes for the country as a whole (for example, in terms of its gross domestic product (GDP) or in terms of reduced welfare and health budgets) in a domain called **Economy**.

The learner's relationship to these domains

Literacy, numeracy and digital learning has immediate impacts on the learner in terms of their knowledge and skills (in the Learning domain), but also in terms of their self-confidence and their sense of what they can achieve (in the Personal Development domain). It also has impacts on other aspects of their lives and on people around them. Ultimately, improved literacy, numeracy and digital skills in a population can have benefits for society and the economy as a whole.

One way of understanding the relationship between the learner and these potentially far-reaching outcomes is to see the learner at the centre of a Domains Wheel.

Diagram 1: Domains Wheel

Identifying outcomes

From our reading of the thematic papers and other research evidence, we have identified benefits, outcomes and indicators relating to the impacts of adult literacy, numeracy, digital skills or wider adult learning. We have collated and combined a number of these into what we feel are measurable outcomes.

We have written these outcomes so that they are explicitly linked to improved literacy, numeracy and digital skills by the individual, or — in relation to the Society and Citizenship and Economy domains — to increased levels of these skills in a population.

The **outcomes**, collected under each **domain** heading, are:

Domain	Outcomes
Learning and Personal Development relating to the acquisition of literacy, numeracy and digital skills; the learner's personal development; and the learner's development of lifelong learning capacities	1. Learners achieve their literacy, numeracy and digital skills learning goals 2. Learners are identifying future learning goals relating to literacy, numeracy, digital skills or other areas of learning 3. Learners are developing confidence, self-esteem and aspiration as a result of their learning 4. Learners are conscious, reflective, active, lifelong learners and citizens

Domain	Outcomes
Family and Intergenerational relating to parents'/guardians' increased capacity, as a result of improved literacy, numeracy and digital skills, to support better outcomes for their children's education, and to the increased value that is placed on learning within families	1. Learners' children have improved outcomes in their education as a result of their parents'/guardians' improved literacy, numeracy and digital skills 2. Parents, guardians and other family members are more engaged in children's education as a result of the parents'/guardians' improved literacy, numeracy and digital skills 3. Education is more highly valued within the family as a result of one or more family member improving their literacy, numeracy and digital skills
Community Life and Social Inclusion relating to how engaged learners are in their communities, including by volunteering, as a result of improved skills and confidence, and the extent to which learners feel more connected to others in society, with a broader world view	1. Learners are more active in community life (geographical or issue/identity-based) as a result of their improved literacy, numeracy and digital skills 2. Learners are taking part in volunteering activity as a result of improved literacy, numeracy and digital skills 3. Learners feel included and connected to other people in society as a result of their improved literacy, numeracy and digital skills

Domain	Outcomes
Health and Wellbeing relating to improved outcomes for health and wellbeing as a result of learners' improved skills and capacity to manage their health and wellbeing	1. Learners' physical health is improved as a result of their improved literacy, numeracy and digital skills 2. Learners' wellbeing is improved as a result of their improved literacy, numeracy and digital skills
Work relating to increased opportunities for learners to move towards employment; to get a job; to keep a job; to earn more; to get a promotion or take on more responsibility; and increased capacity of individuals to earn money through entrepreneurial activities	1. Learners have an increased likelihood of getting a job as a result of improved literacy, numeracy and digital skills 2. Learners have an increased likelihood of keeping a job as a result of improved literacy, numeracy and digital skills 3. Learners have improved work prospects and security as a result of improved literacy, numeracy and digital skills 4. Learners have increased capacity for alternative methods of making an income as a result of improved literacy, numeracy and digital skills

Domain	Outcomes
Financial Capability relating to learners' increased capacity to manage their money through better budgeting and planning; their ability to understand how money works in society and where to get help when they have difficulties	1. Learners' financial capability is increased as a result of improved literacy, numeracy and digital skills
Society and Citizenship relating to increased "social trust" whereby learners trust more people in their communities (for example, people from different social or ethnic backgrounds) to learners being better able to take part in democratic processes such as consultations or voting; and civic engagement and responsibility whereby learners are generally more engaged in environmental concerns, keeping their communities safe and taking part in activities to reduce crime	1. Social trust is increased as a result of more of the population having improved literacy, numeracy and digital skills 2. Democratic engagement is increased because more of the population can access democratic processes as a result of improved literacy, numeracy and digital skills 3. Civic engagement and civic responsibility are increased as a result of more of the population having improved literacy, numeracy and digital skills

Domain	Outcomes
Economy relating to increased productivity and efficiency for employers as a result of workers being more skilled, and to productivity and economic prospects for Ireland as a result of higher levels of skills among the working-age population	1. The efficiency and productivity of businesses and public sector organisations are increased as a result of higher levels of literacy, numeracy and digital skills among their workforce 2. Ireland's economic prospects are improved as a result of higher levels of literacy, numeracy and digital skills in the population

We also present these domains and outcomes in an **Outcomes Framework** diagram in Appendix A.

A common theme arising in our reading and from our interviews with the experts was the need to demonstrate the inter-connected nature of outcomes. The Outcomes Framework shows the linkages between the different domains.

This Framework, along with the Domains Wheel, aim to demonstrate to policy makers that measurement of outcomes should focus on the whole person, and that people are not just cognitive but are social and emotional as well.

Identifying sample indicators

In Appendix C we propose sample indicators, drawn from our reading of the research that could be used to measure progress against the outcomes we identified above. We show sample indicators that could be used in the short-, medium- and longer-terms. In line with the definition of indicator above, it is important to recognise that indicators have different focuses and include qualitative or quantitative targets, depending on the learner's or a learning group's situation, learners' purposes in learning, and the stage they are at in their learning.

It is important to note that indicators should, as far as possible, make reference to the fact that improved literacy, numeracy and digital skills have contributed to or brought about the change that the indicator identifies, for example: "Learners provide examples of community activities that they engage in regularly as a result of their learning".

Section 4 provides insights into effective measurement of outcomes using indicators.

Section 4

Measuring Outcomes

Challenges relating to measuring outcomes

Our research findings show a consensus view that there is value in recognising and measuring the wider outcomes of adult literacy, numeracy and digital skills, and adult education more generally. There is also a consensus that such outcomes are not always valued by, for example, policy makers (in the same way that academic outcomes might be) and that evidence of impact should be communicated clearly, often using different modes of presentation and language depending on the audience. There is also acknowledgement that the measurement of wider outcomes is often a complex task with key challenges.

NIACE describe wider outcomes, such as those described in the Outcomes Framework in Appendix A, as:

> … typically described as 'soft' outcomes, mainly because they are difficult to quantify and measure.[11]

There is evidence that some of these 'softer' outcomes can be of more value to individuals' lives than academic ones or outcomes relating to work (those outcomes that are often described as 'hard'), and that softer outcomes can lead to harder outcomes in due course, as identified by BIS (2013):

> It may be that other outcomes, such as increased self-confidence and self-esteem, are more significant in encouraging and enabling learners to take the next step in their learning journey.[12]

It is important to note that evidence shows that achievement from adult learning can take a long time, as identified by the OECD (2019):

> … learning is a long-term activity whose outcomes will strongly depend on past and future actions and may materialize in the long-run only. This may hamper the ability to detect changes in the short term.[13]

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[11] Capturing the Wider Outcomes of Community Learning: Final report. (2015). National Institute of Adult Continuing Education (England and Wales).

[12] Investigating the Benefits of English and Maths Provision for Adult Learners: Part 1 quantitative assessment. (2013). Department for Business, Innovation & Skills (BIS).

[13] Monitoring Learning Outcomes of Adult Learning Programmes: A review of European best practices on monitoring instruments. (nd). OECD Publishing.

The BIS (2013) report highlights the benefits of measuring outcomes "over a longer period of time",[14] pointing to the approach to measurement that can be identified as the 'gold standard' for robustly evidencing impact: the longitudinal study. (We outline an example of a longitudinal study in Appendix G.)

During our research we identified a number of challenges relating to the measurement of outcomes and set these out below.

a. **The challenge of measuring outcomes where multiple partners or policies are involved**

The OECD states[15] that data relating to the outcomes of non-formal education "rarely exists" and that "different stakeholders must join forces, reflect on what information should be gathered, how to set up the data collection process in practice, and agree on the use of the data".

b. **The challenge of measuring what is valuable**

Our research, including our interviews with international experts, highlighted a recurring theme: what is easily measured is not always valuable, and what is valuable is not always easily measured.

The OECD point out that "participation statistics are only output indicators of adult education programmes".[16] And in a later report they reflect that "there exists … a bias towards collecting only information on the easily identifiable benefits, which may provide only an incomplete picture."[17]

The challenge here is to find ways of measuring what is truly valuable.

c. **The challenge of learners' literacy ability when responding to surveys or taking part in assessments**

The Learning and Work Institute (2019) identified that "providers should be mindful of the literacy skills required for learners to read, fully understand and respond accurately to social metrics questions, and consider the need for alternative arrangements where the literacy skills required are beyond the current literacy levels of the learners."[18]

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14 Investigating the Benefits of English and Maths Provision for Adult Learners: Part 1 quantitative assessment. (2013). Department for Business, Innovation & Skills (BIS).
15 Monitoring Participation in Adult Learning Programmes: A review of European best practices on monitoring instruments. OECD Publishing.
16 Ibid.
17 Monitoring Learning Outcomes of Adult Learning Programmes: A review of European best practices on monitoring instruments. OECD Publishing.
18 Social Metrics: Measuring the outcomes of non-accredited learning. (2019). Learning and Work Institute.

d. The challenge of finding a balance between closely studying a cohort of learners, or less intensely lightly monitoring a broader population

The experts we consulted had differing views in relation to the most effective approach to measuring outcomes for a population. One felt that a focused cohort study, perhaps focused on a town and sustained over time, could provide clear and robust evidence of impact in multiple domains of learners' lives (and for their families and the wider community); another warned that measuring the impacts of learning on individuals' lives closely could make the subjects of the research self-conscious and affect the results. This second expert suggested that a broader population study, which might risk losing detail through "lightness of touch", could be more meaningful in the long run.

The Learning and Work Institute (2019) suggests that "a broad sample of data across provision to demonstrate overall impact may be more useful than a course-based approach or single cohort of learners, as this would help to collect data at sufficient scale for analysis to take place."[19]

e. The challenge of ensuring that practitioners are confident and skilled to apply measurement tools

NIACE (2015) identify that "many providers are not confident to translate the evidence they collect from individual learners into robust quantitative data. As a result, the potential for evidence on wider outcomes and social value to support strategic planning and development work, both internally and externally, is not being fully realized."[20]

In the same report, NIACE also recognises that many tools or approaches to measuring wider outcomes "have been developed in-house and build on existing methods used to collect evidence on the learner experience, particularly individual learning plans (ILPs) and end of course evaluations" and that providers face "difficulties in generating good quality data; lack of time and resources to devote to the work; and the risk of excluding certain learner groups."[21]

The challenge here is one of implementation of measurement tools and collation of data.

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19 Social Metrics: Measuring the outcomes of non-accredited learning. (2019). Learning and Work Institute.
20 Capturing the Wider Outcomes of Community Learning: Final report. (2015). National Institute of Adult Continuing Education (England and Wales).
21 Ibid.

f. The challenge of 'harmonizing' data from multiple sources

This challenge relates to combining or 'harmonizing' the data collected in different places by different practitioners working for different organisations.

The OECD[22] identify a problem arising from tools and methodologies being "typically tailored both to the type of data collected and to the local context", and thus differing greatly. The challenge of 'harmonization' is to "make monitoring results comparable across providers, regions, and time" by losing "some degree of adaptability" in order to coordinate the process.

g. The challenge of finding 'the one' perfect, manageable approach or system

There appears to be an acceptance that a 'gold standard' single approach or tool for measurement does not exist. The research papers we have read, and the experts we have spoken to, all chime with the OECD's[23] statement that:

> … only adopting multiple indicators as well as various assessment methods can provide a clear and exhaustive picture of the impact of learning programmes on adults' outcomes. Moreover, the use of qualitative insights (for example, from interviews) can be equally important to guide understanding of results, especially regarding the wider benefits of adult education.

Despite the challenges described in a) to g) above, the OECD[24] appears confident that wider outcomes can be effectively measured:

> The collection of consistent data for the non-formal sector will also help providers show that non-formal programmes can be monitored and evaluated as carefully as formal trainings, and are as good and important. In some cases, training providers may use the data to make the case for their programmes' excellence and secure sustainable and diversified funding.

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22 Monitoring Learning Outcomes of Adult Learning Programmes: A review of European best practices on monitoring instruments. (nd). OECD Publishing.
23 Ibid.
24 Ibid.

They can also use the information to improve quality, rethink course curriculum, and enhance teaching methods. Finally, policy-makers and more broadly the society as a whole will benefit from better data, as it may not only increase knowledge and quality of the non-formal education sector, but will also help to respond to growing demands for public funds accountability.

In Appendix F we present some good practice guidelines for measuring the outcomes of improved adult literacy, numeracy and digital skills, which could help to address these challenges.

A spectrum of methods and tools for measuring outcomes

Our research revealed a diverse array of measurement approaches, including individual tools but also different methods of carrying out measurement activity.

These methods and tools span a spectrum: from '**softer**' methods and tools such as those applied in a learning setting, to '**harder**' methods and tools such as large-scale research studies or economic analyses.

● **'Soft' outcome measures**

Soft measures are those that are typically carried out in the learning setting, often by a tutor, using tools to record progress such as individual learning plans (ILPs).

Such measurement methods and tools often record progress in learning using formative assessment of knowledge and skills, or by recording learner feedback in relation to improved confidence or ways that learners have used their learning.

The Citizens Curriculum[25] project in England used pre- and post-programme questionnaires that "were designed to capture any change in learners' attitudes towards … learning", so measuring what is often termed 'distance travelled'.

The SOLAS and ETBI toolkit[26] provides guidance on taking a structured approach to identifying and recording learners' achievement and progress.

NIACE[27] identifies a number of common methods used to measure the outcomes of community learning, as follows:

› individual learning plans

› learner surveys and evaluations

› case studies (telling individuals' stories)

● **'Medium-soft' outcome measures**

Measures that provide more quantitative data, such as data from assessments, including QQI awards achieved, can be described as 'medium-soft'.

NIACE[28] identified a number of sources to measure the outcomes of community learning. We would consider measuring data from these sources to be 'medium-soft' measures:

› data from partners (such as referral agencies)

› progression data (relating to progression by learners into, for example, further learning, volunteering, or work)

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25 Citizens' Curriculum: Phase 2 project report. (2016). Learning and Work Institute.
26 Initial and Ongoing Assessment of Adult Literacy and Numeracy at NFQ levels 1-3: Guidelines, Toolkit and Research Report. (nd). SOLAS and ETBI.
27 Capturing the Wider Outcomes of Community Learning: Final report. (2015). National Institute of Adult Continuing Education (England and Wales).
28 Ibid.

SOLAS and ETBI together manage two data systems relating to adult learners and learning provision. The systems are:

› the Funding Allocations Requests and Reporting (FARR) system and

› the Programme and Learner Support System (PLSS).

The FARR system records numbers of learners enrolled, numbers of early leavers and course completers, certificates obtained, and information about learner progression. The PLSS includes a national course database, a course calendar scheduling system, and a learner database. The systems can provide information about learner participation and help providers to plan provision.[29]

● **'Medium-hard' outcome measures**

'Medium-hard' methods and tools include formal research studies that provide robust evidence of correlation or causal effect between learning and outcomes, including trans-national comparative studies such as PIAAC.[30]

The measurement of outcomes relating to strategies such as Healthy Ireland, against the outcomes framework linked to that strategy, can be described as 'medium-hard'.

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29 Monitoring Participation in Adult Learning Programmes: A review of European best practices on monitoring instruments. (nd). Paris: OECD Publishing.

30 CSO (2013). PIAAC 2012 - Programme for the International Assessment of Adult Competencies: Survey Results from Ireland.

- **'Hard' outcome measures**

'Hard' measures seek to 'cost' the benefits of strategic interventions. Such measures often seek to identify a Euro-for-Euro figure to show the return on investment.

Hard measures might seek to show:

- › the increased gross domestic product of a country based on having a more skilled population

- › reductions in the welfare or health budget

- › reductions in the cost of policing due to stronger community cohesion

- **Measuring outcomes relating to Learning and Personal Development**

These outcomes can often be measured through 'soft', formative indicators, drawing on learners' own testimonies and 'self-rating', but also from 'medium-soft' metrics such as data relating to qualifications achieved or further courses a learner has registered for.

- **Measuring outcomes relating to Community Life and Social Inclusion, Family and Intergenerational, Health and Wellbeing, Work, and Financial Capability**

These outcomes can be measured using 'soft' measures, including self-reporting, and 'medium-soft' measures relating to progression, using data from partner agencies.

The outcomes can also be measured using 'medium-hard' approaches that measure progress against policies, strategies and initiatives that have a particular focus (for example, the Healthy Ireland strategy which has an associated outcomes framework). However, these indicators should aim to link outcomes to improved literacy, numeracy and digital skills in order to show a meaningful relationship.

Global, comparative measurement exercises such as PIAAC can provide robust data relating to the correlation between literacy, numeracy and digital skills levels and outcomes in multiple areas of life.

The most robust metric for demonstrating a direct link between outcomes and improvements in literacy, numeracy and digital skills appears to be the dedicated longitudinal study that can track learners' lives over a period of time.

- **Measuring outcomes relating to the Economy and Society**

It can be challenging to make a link between such high level outcomes and improved skills for an individual. A longer view is required, and measures tend to be 'hard', using economic methodologies such as cost benefit analyses, which draw on multiple data sets, including those that situate literacy, numeracy, digital and other skills within a 'big picture', such as PIAAC.[31]

In Appendix D we provide a table showing the spectrum of methods and tools against each domain of outcomes.

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[31] CSO (2013). PIAAC 2012 - Programme for the International Assessment of Adult Competencies: Survey Results from Ireland.

Section 5
Recommendations
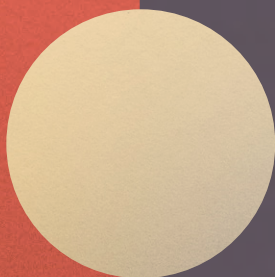
a. A Whole-of-Government **strategy should include the Outcomes Framework** we have proposed in Section 3 and illustrated in Appendix A. NALA should consult on this framework to ensure buy-in from the adult literacy, numeracy and digital skills sector and officials in the relevant policy areas within government.

b. NALA should **endorse a 'mixed methods' approach to measurement of outcomes**. Both 'soft' and 'hard' measurement methods and tools should form part of a mixed methods approach to evidence the achievement of outcomes.

c. The strategy should **include plans to train practitioners and managers** in adult literacy, numeracy and digital skills services **on how to build outcome measures into their planning**. The training should include a focus on good practice in carrying out measurement of indicators in ways that are inclusive of all learners and abilities.

d. NALA should seek to **embed indicators relating to literacy, numeracy and digital skills within policies, strategies and initiatives where there is potential to do so**. They should also seek to formalise data sharing agreements with government departments in relation to measurement exercises (for example, relating to the Healthy Ireland strategy, using the Health Ireland Outcomes Framework).

   In Appendix E we present a table showing policies, strategies and initiatives that have relevance to the eight domains we have identified. The table reveals a number of gaps where there could be opportunities for NALA to begin conversations with government departments responsible for the policies, strategies or initiatives in question.

e. NALA should explore the possibility of coordinating **a sustained programme of research activity** (possibly overseen by a specially-convened committee of research partners) to focus on the impact of the strategy. The research programme should aim to:

- Be aware of research evidence of:

  › cause and correlation between low literacy, numeracy and digital skills and outcomes for individuals, their families and communities

  › what is current best practice in the delivery of literacy, numeracy and digital skills learning provision (for example, relating to engagement, assessment, and educational guidance)

- Commission or carry out research activity that:

  › provides evidence of the impact of improved literacy, numeracy and digital skills on particular domains

  › refreshes the cost benefit analysis carried out by NALA in 2009[32]

- Report on the achievement of the strategy's outcomes on an ongoing basis, using the Outcomes Framework.

- Produce case studies about the impact of improved literacy, numeracy and digital skills for individual learners, highlighting outcomes that can be identified within the different domains of the Outcomes Framework.

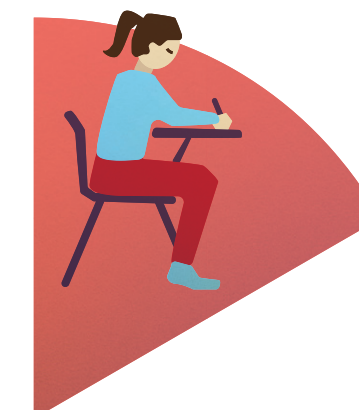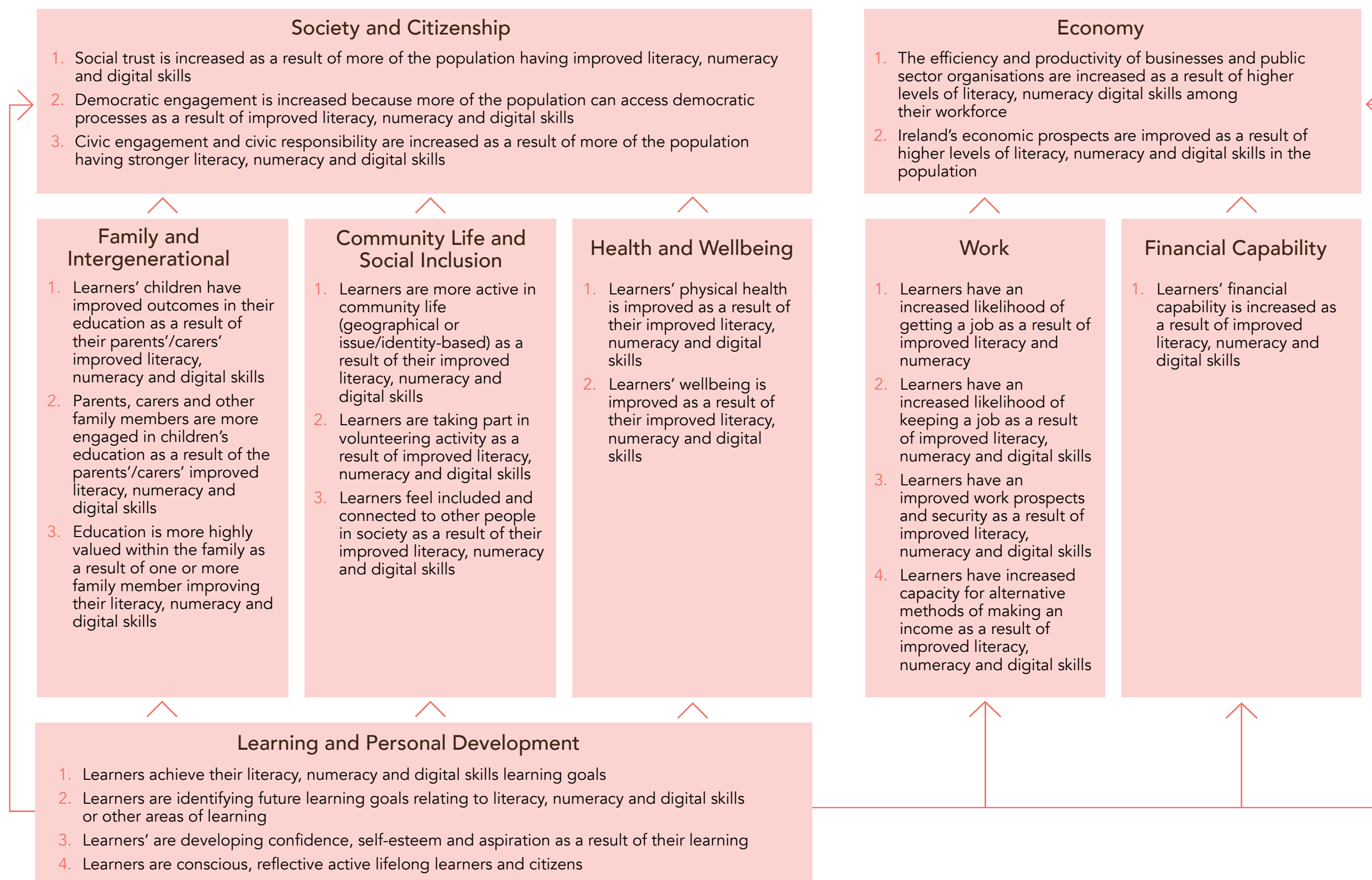32 NALA (2009). Dorgan J. A cost benefit analysis of adult literacy training Research report.

Appendices

Appendix A: Outcomes Framework

Society and Citizenship

1. Social trust is increased as a result of more of the population having improved literacy, numeracy and digital skills
2. Democratic engagement is increased because more of the population can access democratic processes as a result of improved literacy, numeracy and digital skills
3. Civic engagement and civic responsibility are increased as a result of more of the population having stronger literacy, numeracy and digital skills

Economy

1. The efficiency and productivity of businesses and public sector organisations are increased as a result of higher levels of literacy, numeracy digital skills among their workforce
2. Ireland's economic prospects are improved as a result of higher levels of literacy, numeracy and digital skills in the population

Family and Intergenerational

1. Learners' children have improved outcomes in their education as a result of their parents'/carers' improved literacy, numeracy and digital skills
2. Parents, carers and other family members are more engaged in children's education as a result of the parents'/carers' improved literacy, numeracy and digital skills
3. Education is more highly valued within the family as a result of one or more family member improving their literacy, numeracy and digital skills

Community Life and Social Inclusion

1. Learners are more active in community life (geographical or issue/identity-based) as a result of their improved literacy, numeracy and digital skills
2. Learners are taking part in volunteering activity as a result of improved literacy, numeracy and digital skills
3. Learners feel included and connected to other people in society as a result of their improved literacy, numeracy and digital skills

Health and Wellbeing

1. Learners' physical health is improved as a result of their improved literacy, numeracy and digital skills
2. Learners' wellbeing is improved as a result of their improved literacy, numeracy and digital skills

Work

1. Learners have an increased likelihood of getting a job as a result of improved literacy and numeracy
2. Learners have an increased likelihood of keeping a job as a result of improved literacy, numeracy and digital skills
3. Learners have an improved work prospects and security as a result of improved literacy, numeracy and digital skills
4. Learners have increased capacity for alternative methods of making an income as a result of improved literacy, numeracy and digital skills

Financial Capability

1. Learners' financial capability is increased as a result of improved literacy, numeracy and digital skills

Learning and Personal Development

1. Learners achieve their literacy, numeracy and digital skills learning goals
2. Learners are identifying future learning goals relating to literacy, numeracy and digital skills or other areas of learning
3. Learners' are developing confidence, self-esteem and aspiration as a result of their learning
4. Learners are conscious, reflective active lifelong learners and citizens

Appendix B: Recognised benefits of improved literacy, numeracy and digital skills in the eight domains

Our research revealed an array of potential benefits across the eight domains that can be evidenced as the result of improved literacy, numeracy and digital skills. We present a selection of these benefits below.

It is important to note that many of the benefits identified here were articulated by learners through focus group or similar studies, so we have retained their language and phrasing where possible.

Domain	Potential benefits of improved literacy, numeracy and digital skills
Learning and Personal Development	- Improved skills - Improved capacity to apply skills - Improved confidence, self-esteem and a willingness to try 'new things' - A positive mindset and aspiration - A focus on self-development - Increased empathy - Self-actualisation and self-efficacy - Communication skills - Ability to work with others - Understanding of how they learn

Domain	Potential benefits of improved literacy, numeracy and digital skills
Family and Intergenerational	- Parents' and children's skills improve - Families learn together - Parents support their children's learning - Improved parenting skills - Better understanding of the education system - Learning is valued more in the family - Improved family relationships - Improvements in family routine - Strengthened bonds between family members
Community Life and Social Inclusion	- A reason to get out of bed - More social interaction - Broader social and political outlook - Increased tolerance of social diversity - New friendships - Reconnecting with people and community - Emotional connection with other people in similar circumstances - Increased independence - Civic participation through involvement in community/pressure/political groups, membership of networks, and voting - Improved confidence and ability to use public services

Domain	Potential benefits of improved literacy, numeracy and digital skills
Health and Wellbeing	● Improved physical health ● Increased physical activity ● Improved mental health ● Increased ability to manage health ● Improved outlook on life ● Increased resilience ● Improved diet ● Reduced anxiety, stress and depression ● Less intervention from external agencies
Work	● Ideas for new jobs / careers ● Increased likelihood of keeping a job ● Increased earning potential and more money ● More effective at work ● Able to use new technology ● Attending further in-work / work-related training ● Improved teamwork ● Ability to use own initiative ● Ability to work without supervision ● Willingness to attempt tasks

Domain	Potential benefits of improved literacy, numeracy and digital skills
Financial Capability	● Better able to budget ● Knowing where to get help ● Understanding how money works in society ● Getting better deals ● Improved consumer confidence
Society and Citizenship	● Active citizenship, for example, voting in elections ● Reduction in crime ● Reduction in social unrest ● Increased social trust ● Increased civic engagement ● Increased political efficacy ● Greater equality and access for individuals to services
Economy	● Increase in productivity for businesses ● Increased efficiency in the delivery of taxpayer-funded services ● Increase in productivity for the economy as a whole (GDP) ● Exchequer gains ● Reduction in the burden on the state for welfare, health and crime prevention

Appendix C: Sample indicators of outcomes from improved adult literacy, numeracy and digital skills over time

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Learning and Personal Development	1. Learners achieve their literacy, numeracy and digital skills learning goals	Learners state that they are learning new skills and knowledge Formative and informal assessment demonstrates learning in relation to baseline assessment of skills Learning records show learning taking place	Learners are achieving QQI qualifications (possibly measured against % targets for a group of learners achieving) Learners are completing Writeon.ie units (possibly measured against targets)	Learners are working towards/are achieving further qualifications at higher levels Learners state that they are encouraging others to take part in literacy, numeracy and digital skills learning opportunities (also, referrals records might show referrals of new learners by existing learners)
	2. Learners are identifying future learning goals relating to literacy, numeracy and digital skills, or to other areas of learning	Learners express confidence or increased confidence in their learning Learners express willingness and enthusiasm for continuing to learn	Learners state or record identifying further learning goals for the short- to medium-term	Learners state or record identifying further learning goals for the longer-term
	3. Learners are developing confidence, self-esteem and aspiration as a result of their learning	Learners are becoming more engaged in discussions or group activities in the learning environment	Learners identify that improving their learning has increased their self-confidence in different areas of their lives	Learners demonstrate confidence in a range of activities within and outside the learning environment

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Learning and Personal Development		Learners state that they feel more confident as a result of improving their skills Learners express ideas about what they want do next in their learning (or in other aspects of their lives)	Learners have set short- to medium-term goals for themselves in their learning or in other areas of their personal development Learners are working towards Personal Development QQI awards Learners can give examples of decisions they have made as a result of their increased self-confidence	Learners have identified and set longer-term goals for themselves in their learning or in their personal development Learners have achieved Personal Development QQI awards Learners identify that learning has helped them to develop attributes such as: ● a more positive general mindset ● increased assertiveness ● increased ability to make decisions ● more motivation to achieve things in their lives ● an increased sense of what they can achieve ● an increased willingness to try new things ● improved self-esteem ● personal fulfilment ● an increased ability to communicate with others a willingness and confidence to solve problems ● increased quality of life ● increased hope in their lives
	4. Learners are conscious, reflective, active lifelong learners and citizens	Learners complete a reflective log or record of learning	Learners can describe their strengths and weaknesses in any subject they are learning Learners can describe how they learn most effectively Learners demonstrate critical thinking in their application of knowledge, skills and understanding Learners identify their goals for learning and for using their learning in different areas of their lives	Learners can describe the role of learning in their personal development Learners advocate to others the opportunities that learning can provide

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Family and Intergenerational	1. Learners' children have improved outcomes in their education as a result of their parents'/ carers' improved literacy, numeracy and digital skills	Learners state that they can help their children with their immediate learning needs (for example, homework)	Teachers of learners' children say the children are succeeding more in their learning Learners' children are performing better in school-based assessments	Learners' children are achieving consistently and to a higher standard in their learning, attributable to their parents'/carers' learning
	2. Parents, carers and other family members are more engaged in children's education as a result of the parents'/carers' improved literacy, numeracy and digital skills	Learners state that they feel more confident in accessing and understanding information relating to their children's education (for example, reading letters or looking at information on the school website)	Learners identify examples of their increased engagement in their children's education	Learners state that they feel more confident dealing with their children's school and education professionals Education professionals say that parents and carers are more engaged with the school
	3. Education is more highly valued within the family as a result of one or more family member improving their literacy, numeracy and digital skills	Learners state that they are encouraging other family members, including their children, to engage in and value learning	Learners can provide examples of ways in which family members have shown more interest in learning	Learners can provide examples of ways that other family members have become more engaged in education or started learning themselves Learners' family members have begun learning

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Community Life and Social Inclusion	1. Learners are more active in community life (geographical or issue/identity-based) as a result of their improved literacy, numeracy and digital skills	Learners state that learning helps them to feel less isolated and more included in their community Learners join or start to reuse their library	Learners can provide examples of how their learning has led to their engaging in community activities over and above their learning activity, for example, taking part in volunteering activity, or using digital technology at their local library	Learners provide examples of community activities that they engage in regularly as a result of their learning
	2. Learners are taking part in volunteering activity as a result of improved literacy, numeracy and digital skills	Learners express interest in using their learning in a volunteering role (not all learners will wish to pursue volunteering, but a % target for a proportion of learners within a group could be set)	Learners who want to volunteer state that they have enquired about or begun a volunteering role	Learners are volunteering and can demonstrate that they are using their learning in their volunteering activities
	3. Learners feel included and connected to other people in society as a result of their improved literacy, numeracy and digital skills	Learners state that learning has enabled them to feel more connected to other people (for example, other learners in their group)	Learners can provide examples of ways in which learning has led to them feeling more connected to others in their community and less isolated	Learners state that learning has enabled them to have a significantly reduced feeling of isolation, and say that they now have, for example: • more social interaction • a broader outlook and understanding of society • increased tolerance of social diversity • new friendships, or reconnection with old friends or networks

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Health and Wellbeing	1. Learners' physical health is improved as a result of their improved literacy, numeracy and digital skills	Learners state that they are better able to manage their immediate health needs, including reading prescriptions, following instructions and calculating drug dosages

Learners state that they now access and understand health information online

Learners state that they feel more confident about communicating with health professionals

Learners can now identify what changes they could make to improve their physical and mental health (for example, by giving up smoking or taking up meditation) | Learners' state that learning has improved their physical health

Learners' state that learning has improved their mental health

Learners can identify changes they have made or are making to improve their physical and mental health

Learners say that they are now able to make more informed choices

Learners state that they are making less use of health services because they can better access and understand written or numerical information (including information online) about staying healthy | Learners identify a number of changes they have made to improve their physical and mental health, based on information they can now access and use as a result of improved literacy, numeracy and digitals skills

Learners can make a plan to stay healthy and well in the longer term, using information about healthy living and managing health conditions

Indicators used by health professionals demonstrate improved physical and mental health that can be linked to the individual's learning |

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Health and Wellbeing	2. Learners' wellbeing is improved as a result of their improved literacy, numeracy and digital skills	Learners state that learning is contributing to improved wellbeing, identifying benefits such as: ● improved mental health ● improved outlook on life ● feeling less isolated in their community ● feeling more motivated ● having more structure to their day/week Learners state that they can now access information about their wellbeing online Learners can identify what changes they could make to improve their wellbeing (for example, by giving up smoking or taking up meditation)	Learners' state that learning has improved their wellbeing, giving examples Learners can identify changes they have made or are making to improve their wellbeing as a result of improving their skills (for example, coming off anti-depressants, taking up meditation) Learners state that they are making less use of health or support services because they can better access written, numerical or online information about maintaining their wellbeing	Learners identify a number of changes they have made to improve their wellbeing, based on information they can now access and use as a result of improved skills Learners can make a plan to maintain their wellbeing in the longer term using written and numerical information available, including information online Indicators used by health and wellbeing professionals demonstrate improved wellbeing and can be linked to the individual's learning

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Work	1. Learners have an increased likelihood of getting a job as a result of improved literacy and numeracy	Learners identify the learning goals that can help them to move towards employment, including self-employment	Learners state that they feel more confident about getting a job Learners state that they feel more confident about setting up in business	Learners can provide examples of moves they have made towards getting a job, or setting up in business Labour market data shows that more people have gained employment, including self-employment, as a result of improved literacy and numeracy
	2. Learners have an increased likelihood of keeping a job as a result of improved literacy, numeracy and digital skills	Learners can identify that their learning can be applied in their work	Learning can give examples of ways their learning is helping them in their work (for example, comments from a supervisor)	Employers reporting provides examples of individuals who have been retained in employment as a result of improving their skills
	3. Learners have improved work prospects and security as a result of improved literacy, numeracy and digital skills	Learners can identify that their learning can be applied in their work, including in self-employment	Learners can identify examples of opportunities they can aim for at work (for example, increased pay, increased responsibility, promotion) as a result of improving their skills	Learners identify examples of progression at work Employer/supervisor reports provide examples of employees who have progressed at work as a result of improved skills
	4. Learners have increased capacity for alternative methods of making an income as a result of improved literacy, numeracy and digital skills	Learners can identify that their new skills could be applied in earning money through enterprise (this would not be appropriate for all learners)	Learners for whom this is of interest can plan their ongoing and future learning with a view to developing enterprise skills Learners can give examples of activity to set up and run a business (for example, seeking business advice)	Learners have used their skills to set up and run a business

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Financial capability	1. Learners' financial capability is increased as a result of improved literacy, numeracy and digital skills	Learners state that they understand more about the way money works in society (including, for example, banking, credit unions, pensions, interest rates) because they can now: • understand financial terms • read and understand information about financial products • calculate interest rates • identify best consumer deals • access advice about money and debt, including online	Learners can provide examples of ways in which their improved skills have helped them to feel more confident about handling money on a day-to-day basis or in a job or voluntary role Learners can complete simulated budgeting tasks or make consumer decisions based on real or simulated situations	Learners can demonstrate skills relating to money management such as budgeting and longer-term planning Learners can describe where to get help when they have money difficulties Learners state that they are in a more stable or sustainable financial position as a result of improving their literacy and numeracy and digital skills Learners' financial position has improved (it's important to bear in mind the sensitivity of this kind of evidence)
Society and Citizenship	1. Social trust is increased as a result of more of the population having improved literacy, numeracy and digital skills	Learners state that their learning is increasing their understanding of people in their communities and in wider society who are "different from them", for example, in terms of social background and ethnicity	Learners can give examples of ways in which they have a better understanding of different cultures and people from different communities, and can provide examples of engagement with people who are "different from them"	Learners identify that learning has changed their outlook on society and broadened their worldview, giving examples of ways in which their thinking has changed and broadened Community and social cohesion is evidenced to have increased as a result of increased learning activity in society

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Society and Citizenship	2. Democratic engagement is increased because more of the population can access democratic processes as a result of improved literacy, numeracy and digital skills	Learners state that their learning has given them a clearer insight into democratic processes (local, national and at EU level) Learners express interest in becoming more involved in democratic processes such as voting more often	Learners can give examples of ways in which they are more engaged and active in democratic processes	Learners identify that learning has increased their democratic engagement in a number of ways, giving examples Increased democratic engagement is evidenced to result from increased skills levels in society
	3. Civic engagement and civic responsibility are increased as a result of more of the population having improved literacy, numeracy and digital skills	Learners state that their learning has led to their having more interest in civic activities (for example fundraising, community development, community activism, engagement in environmental issues, and engagement with local campaigns)	Learners can give examples of ways in which they have become more active in civic engagement	Learners identify that learning has increased their civic engagement Increased civic engagement is evidenced to have resulted from increased skills levels in society Crime and disorder are reduced as a result of increased civic engagement as a result of increased skills levels in society

Domain	Outcomes	Sample short-term indicators	Sample medium-term indicators	Sample long-term indicators
Economy	1. The efficiency and productivity of businesses and public sector organisations are increased as a result of higher levels of literacy, numeracy digital skills among their workforce	More workplace-based or work-related literacy, numeracy and digital skills learning is taking place (assessed against a baseline measure of activity)	Employer surveys shows that X% of workers are fulfilling their job roles effectively	Employer surveys provide evidence that efficiency and productivity is significantly increased
	2. Ireland's economic prospects are improved as a result of higher levels of literacy, numeracy and digital skills in the population	More adults are engaged in learning to improve their literacy, numeracy and digital skills (assessed against a baseline measure of activity)	More people of working age are in work (assessed against a baseline measure of employment activity) as a demonstrable result of improving their skills	Increased productivity in multiple sectors is evidenced to have resulted in part from a workforce that has higher levels literacy, numeracy and digital skills

Appendix D: Spectrum of measurement methods and tools

Note: the table includes examples of measurement methods and tools that we know about.

	Types of Measurement **Softer measurement methods and tools** ←		Types of Measurement **Harder measurement methods and tools:** →	
Domain	Learner self-assessment, formative assessment, informal statements from tutors	Formal measures of learning, including summative assessment and/or qualifications. Also, local or national pieces of research focused on particular themes or domains	Large-scale, international, comparative and longitudinal research programmes	Cost benefit analyses
Learning and Personal Development	Learning plans Progress records Ongoing / formative assessment Learners' self reports **Examples of measurement methods and tools:** ● Individual learning plans	Summative assessments Qualification achievements (in literacy, numeracy, digital skills, personal development) Reports from partner agencies (where appropriate) on individuals' progress	Skills surveys (including international surveys) **Examples of measurement methods and tools:** ● PIAAC[33]	

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[33] Ireland is participating in the "2nd cycle of PIAAC", which will report in 2023 https://www.oecd.org/skills/piaac/about/piaac2ndcycle/

	Types of Measurement **Softer measurement methods and tools** ←		Types of Measurement **Harder measurement methods and tools:** →	
Learning and Personal Development	• Group learning plans • Learner surveys • Learner focus groups • PLSS / FARR • WriteOn.ie records • Rickter Scale[34] • Scotland's Adult Literacies Curriculum Wheel[35] • Glasgow's Learning Outcomes Evaluation System[36]	**Examples of measurement methods and tools:** • Assessments on Writeon.ie • QQI Awards levels 1 to 4 in relevant subjects (data kept by the centre or provided by QQI) • PLSS / FARR • Bespoke research into the impact of learning on personal development outcomes		

34 http://www.rickterscale.com/
35 Page 9 in https://education.gov.scot/Documents/adult-literacies-curriculum-framework.pdf
36 https://www.glasgowlife.org.uk/glasgows-learning

	Types of Measurement		Types of Measurement	
	Softer measurement methods and tools ⟵		**Harder measurement methods and tools:** ⟶	
Family and Intergenerational	Learners' self reports **Examples of measurement methods and tools:** ● PLSS / FARR	Bespoke research into the impact of improved literacy, numeracy and digital skills on family and intergenerational outcomes Feedback / records from agencies that support families, and from schools	National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on families and intergenerational outcomes **Examples of measurement methods and tools:** ● PIAAC	
Community Life and Social Inclusion	Learners' self reports **Examples of measurement methods and tools:** ● PLSS / FARR	Bespoke research into the impact of improved literacy, numeracy and digital skills on learners' community engagement and social inclusion outcomes **Examples of measurement methods and tools:** ● The forthcoming Social Inclusion and Community Activation Planning Tool could offer an opportunity for measurement	National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on community and social inclusion **Examples of measurement methods and tools:** ● PIAAC	

Health and Wellbeing	Types of Measurement **Softer measurement methods and tools** ←		Types of Measurement **Harder measurement methods and tools:** →	
	Learners' self reports Formative assessment of skills used in managing health **Examples of measurement methods and tools:** ● Individual learning plans ● Group learning plans ● Learner surveys ● Learner focus groups ● PLSS / FARR ● Rickter Scale	Bespoke research into the impact of learning on a sample of learners' health and wellbeing Reports from linked agencies (where appropriate) on individuals' progress **Examples of measurement methods and tools:** ● PLSS / FARR	National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on health and wellbeing outcomes **Examples of measurement methods and tools:** ● Measuring activity using the Healthy Ireland Outcomes Framework ● PIAAC	Research into health service usage and costs **Examples of measurement methods and tools:** ● Economic reports on health costs

	Types of Measurement **Softer measurement methods and tools** ←		Types of Measurement **Harder measurement methods and tools:** →	
Work	Learners' self reports Employers' reports on learners' progress (if available) **Examples of measurement methods and tools:** ● PLSS / FARR	Records or reports of employment / volunteering (if available) Bespoke research into the impact of improved literacy, numeracy and digital skills on employment / employability / volunteering outcomes	National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on employment/ employability **Examples of measurement methods and tools:** ● PIAAC	Productivity (GDP) measures **Examples of measurement methods and tools:** ● Fiscal reports
Financial Capability	Learners' self reports Formative assessment relating to budgeting and other money skills, including accessing information online **Examples of measurement methods and tools:** ● PLSS / FARR	Bespoke research into the impact of improved literacy and numeracy on learners' financial capability outcomes	National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on financial capability	National reports on levels of debt, savings and borrowings

	Types of Measurement **Softer measurement methods and tools** ⟵		Types of Measurement **Harder measurement methods and tools:** ⟶	
Society and Citizenship	Learners' self reports **Examples of measurement methods and tools:** ● PLSS / FARR		National or international research programmes relating to the role of education (including where possible adult learning and adult literacy, numeracy and digital skills) on wider society and citizenship **Examples of measurement methods and tools:** ● Tools to measure Sustainable Development Goal 4, Quality Education could provide data	National reports on democratic engagement (for example, voting rates)
Economy			National or international research programmes relating to the role of education (including where possible adult learning and adult literacy and numeracy) on the wider economy	Economic measures of efficiency and productivity, including in terms of welfare budget, health budget and taxation **Examples of measurement methods and tools:** ● Reports on welfare costs ● Reports on revenue levels

Appendix E: Outcomes of adult literacy, numeracy and digital skills — links across Irish policy, strategy and initiatives

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Learning and Personal Development	Action Plan for Education Framework 2019	Education and Skills	Yes	Sets out indicators after each of the five Goals	It would be worth approaching the Department to seek to embed adult literacy, numeracy and digital skills indicators against relevant Goals (for example, Goal 4)
	FET Strategy	Education and Skills	Yes	New strategy being developed, with indicators planned	NALA is already engaged in discussions around this strategy and measures associated with it
	National Skills Strategy 2025	Education and Skills	Yes	Makes reference to PIACC indicators, SOLAS's planned measurement of FET progress, and includes 2025 indicators relating to literacy and numeracy scores	NALA should continue to engage around the measurement of progress in relation to this strategy

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Learning and Personal Development	Supporting Working Lives and Enterprise Growth in Ireland	Education and Skills	Yes	Makes reference to PIACC and literacy scores Sets targets for numbers of training courses and participation	NALA could request data relating to the amount of literacy, numeracy and digital skills training that is taking place
	The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020	Education and Skills	Yes	Success appears to be based on the completion of actions (adult literacy is named in two of these)	
	Sláintecare 2019 Action Plan	Health	In terms of health literacy only	This is currently unclear	NALA should keep in touch with officials responsible for this strategy around how health literacy will be measured
Family and Intergenerational	First 5: A Whole-of-Government Strategy for Babies, Young Children and their Families 2019-2028	Children and Youth Affairs	Yes	The strategy names an 'indicator set' that has been developed	NALA should have continued engagement with the Early Years Policy and Strategy Team in relation to measurement against the indicator set

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Community Life and Social Inclusion	Our Public Libraries 2022 (incorporating the Right to Read Programme)	Rural and Community Development	Yes	The strategy charges the Libraries Development Committee to develop "an outcomes framework, with appropriate outcome and output performance indicators" – these do not yet appear to be available	It would be worth approaching the Libraries Development Committee to seek to influence the outcomes framework they will be developing
	Social Inclusion and Community Activation Programme (SICAP)	Rural and Community Development	Yes	A 'distance-travelled' tool is being piloted: "The tool will measure the successes accrued in areas relating to confidence, literacy and numeracy, communication skills, connecting with others and goal setting"	NALA will get sight of this tool in due course and might find opportunities for a data sharing agreement to be put in place

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Community Life and Social Inclusion	Joint Irish Prison Service/ Education and Training Boards Ireland Prison Education Strategy 2019 – 2022	Irish Prison Service and ETBI	Yes	Strategy says: "The Irish Prison Service will meet annually with the Chief Executives and Head Teachers to review the implementation of the joint strategy. Meetings will take place three times per year between the Education section of the Irish Prison Service and the Head Teachers to plan and review all education-related activities in prisons. The IPS commits to ongoing consultation on relevant policy developments and other developments that may impact on education provision, through the Care and Rehabilitation Directorate."	It could be worth approaching the Education section of the Irish Prison Service to seek to influence the measurement of literacy, numeracy and digital skill indicators in any measurement activities that arise
Health and Wellbeing	Healthy Ireland	Health	Yes	Healthy Ireland Outcomes Framework, which seems to rely on measurement feeding in from surveys such as PIAAC, though it is unclear	It would be sensible for NALA to continue to engage with this strategy around methods and tools for collecting data against the Outcomes Framework

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Work	Workplace literacy in particular around sectors identified by the Expert Group on Future Skills Needs	Business, Enterprise and Innovation	Likely to feature in reports as they are produced for individual sectors (for example, the Food and Drink sector)	Reports relating to the skills needs of individual sectors are published on **www.skillsireland.ie**. Individual reports make recommendations for monitoring progress.	It might be possible to influence sectors of the economy through representative bodies such as Food and Drink Ireland, to ensure that literacy, numeracy and digital skills indicators are included in the measurement sections of any future sectoral reports
	Action Plan for Jobs	Employment Affairs and Social Protection	Not explicit but could be encompassed under 'skills'	The 2016 Action Plan for Jobs included a 'performance assessment framework' with a skill section where literacy, numeracy and digital skills could be explicitly measured	It might be possible to embed literacy, numeracy and digital skills indicators in any future version of a performance assessment framework
	Pathways to Work 2016-2020	Employment Affairs and Social Protection	Yes	The strategy set out a set of 10 metrics in 2016 to "act as indicators of progress in addressing the challenges and delivering on the vision outlined". No mention in these metrics of literacy, numeracy or digital skills	It might be possible to seek to embed literacy, numeracy and digital skills within future metrics

Domains	Most relevant policies and strategies for each domain	Government department	Literacy, numeracy and digital skills already referenced or linked	Outcomes frameworks / indicators set	Opportunities for NALA to influence
Financial Capability	Competition and Consumer Protection Commission Financial Education work	Finance	No	The Commission's website identifies financial education programmes but there does not appear to be a strategy in place	It might be worth approaching the Commission to see how adult literacy, numeracy and digital skills might feature in any future strategy in this area
Society and Citizenship	Digital Skills for Citizens Scheme	Communications, Climate Action and Environment	Yes, in relation to digital literacy	There does not appear to be an actual strategy in place	It might be worth engaging with the Scheme's managers to explore opportunities for metrics about increased levels of participation in the scheme and measurement of outcomes
	Broadcasting Authority of Ireland and Media Literacy Ireland	Communications, Climate Action and Environment	Yes	Not clear	Future measurement activities might provide opportunities for identifying measures of outcomes relating particularly to digital literacy
	Sustainability Development Goals National Implementation Plan 2018-2020 and the Voluntary National Review (VNR)	Communications, Climate Action and Environment	Yes	The Voluntary National Review appears to align Irish policies and strategies against the Sustainability Development Goals and to commit to measuring progress against these policies	Not Clear
Economy	A Strategy for Growth – Medium-Term Economic Strategy – 2014-2020	Department of Foreign Affairs and Trade	No (there is mention of literacy and numeracy skills for children)	Not clear	Not clear

Appendix F: Guidelines on effective measurement of wider outcomes of adult literacy, numeracy and digital skills

- **Impact should be built into the planning process**
  An 'architectural' approach to outcomes measurement (where indicators of success are identified during the planning stage of a programme) is more desirable than an 'archaeological' approach. (In an archaeological approach, the evaluation takes place in retrospect, 'digging up' any positive impacts that might have occurred.)

- **Involve learners from the start**
  Learners should be involved in the planning of programmes, initiatives and services, and contribute to the setting of success targets for themselves and for the programme as a whole. Indicators can then be set, and plans made for measuring them.

- **Partners should collaborate in the planning of outcome measurement**
  Where more than one partner organisation is supporting learners, indicators of success for the programme should be developed collaboratively, with data collection processes agreed, and a plan for analysing and storing data produced.

- **Focus on measuring outcomes, not outputs**
  The measurement of **outputs** (such as participation rates and course completion rates) has its place in demonstrating the effectiveness of a programme (for example, that learners are engaged, and supported to persist in their learning). However, where possible, measurement should seek to evidence **outcomes.**

  One way of ensuring outcomes are being measured is to create a logic model[37] diagram of a programme, where inputs (such as funding) and outputs (such as the delivery of a course) are shown as contributing to short-, medium-, and longer-term outcomes.

- **Ensure measurement tools are appropriate for the learners**
  The planning of outcome measurement should take account of learners' likely capacity and ability to respond to written questions, whether on paper or online. Where possible, an inclusive approach to measurement should be considered, allowing for scribing of answers, or for answers to be recorded or provided in a focus group-type setting.

- **Consider the impact of measurement activities on learners**
  Consider the effect that a measurement exercise might have on a group of learners. Research ethics require that subjects of research know and understand what the research is about, and this could make learners self-conscious that measurement is taking place. Aim for a balance between a robust, focused study on a single cohort of learners over a period of time, and a 'lighter-touch' study of outcomes across a population; there will be advantages and disadvantages to both approaches.

- **Practitioners need training, time and support**
  Practitioners should be trained in implementing and using measurement tools (whether questionnaires, interviews or other methods of tracking learners' progress and outcomes); they will require time and ongoing support to enable them to carry out the task effectively.

- **Indicators and tools should allow for harmonization of data**
  Consider the 'harmonization' of data being collected, for example, in the diverse settings in which a programme is delivered. Approaches to the measurement of indicators, including the tools used, should be planned to ensure common data is being collected in ways that ensure the data is valid and comparable.

- **Encourage a mixed methods approach**
  A mixed methods approach to outcome measurement should be encouraged, with a range of tools and methods used, to ensure that:

  › all learners who need to be included are able to participate

  › a rounded picture of the impact of a programme can be produced (with qualitative and quantitative data contributing to that picture).

- **Use technology**
  Where possible, technology should be used in data collection, for example, using online tools such as surveys. Data collected in this way can be more efficiently analysed.

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37 https://www.gov.uk/government/publications/evaluation-in-health-and-well-being-overview/introduction-to-logic-models

Appendix G: Examples of outcome measurement

1. **The Longitudinal Study of Adult Learning: USA**

The Longitudinal Study of Adult Learning (LSAL) was run in the US state of Oregon by Professor Stephen Reder of the University of Portland. The study, which ran from 1998 to 2007, followed approximately 1000 "high school dropouts" whose ages at the start of the process ranged from 18 to 44 years.

Prior to the LSAL, most research had looked at the impacts of adult literacy learning in single contexts or over relatively short periods of time. In contrast to those studies, the LSAL was designed to look at "life-wide and lifelong trajectories of adult learning and literacy development"[38]. It sought to examine the changes in learners' literacy and their uses of literacy in multiple contexts and over significant periods of time. Two of the research questions[39] made explicit the intention to measure the relationship between improved literacy and other areas of learners' lives:

1. What life experiences are associated with adult literacy development? How do formally organized basic skills programs contribute to these learning trajectories? Workplace training? Other contexts and activities?

2. What impacts does adult literacy development have on social and economic outcomes?

The researchers carried out in-depth interviews and skills assessments with learners in their own homes, in six research "waves" or sessions. The research team asked learners about changes they had noticed in their literacy skills and how they used their skills.

The learner interviews in each wave collected information about social, economic and educational status and activities (for example, participation in training, employment, job characteristics and earnings, household and family composition, life goals and aspirations).

The focus was on measuring change over time, but there were also opportunities to ask specific questions relating to one-off topics in a particular wave.

Throughout the nine-year project, the research team also collected data linked to individuals' Social Security numbers about their participation in programmes, and about their education, employment and earnings; this data was gathered with learners' permission.

The value of a longitudinal study such as the LSAL is reflected in its findings, which provided important insights on the ways that:

- literacy capabilities continue to develop in adult life after leaving school

- literacy development varies from person to person

- age has an effect on literacy growth

- life history events have effects on literacy development

In policy terms, the LSAL provided robust and convincing evidence to strengthen the economic case for investments in adult literacy development.

Such a large-scale study might not easily be replicable in Ireland, given the length of time needed and amount of sustained funding that would be required over this period. The LSAL was closely focused on individuals within one city in one state of the USA, but there could be advantages in Ireland undertaking a lighter-touch, shorter study but with a larger and more spread-out sample cohort of learners.

2. **The Citizens' Curriculum: England**

In 2014/15 the National Institute of Adult Continuing Education, or NIACE (now the Learning and Work Institute[40]), was supported by the UK Government's Department of Business, Innovation and Skills to pilot a "Citizens' Curriculum" model of learning for adults. The Citizens' Curriculum model:

promotes learning which is locally-led, involves learners in shaping its contents, and interlinks basic skills in language (English for Speakers of Other Languages), literacy and numeracy with digital, financial, health and civic capabilities.[41]

38 Reder, S. (2012). The Longitudinal Study of Adult Learning: Challenging assumptions. Canada: The Centre for Literacy.
39 Ibid.

40 https://www.learningandwork.org.uk/
41 Stevenson, A., Robey, C., & Pagett, B. (2015). Towards a Citizens' Curriculum: Project report on the phase 1 pilots. Leicester: National Institute of Adult Continuing Education (England and Wales).

An evaluation of the pilot's first phase confirmed that such an approach was feasible and that the first phase pilot had "resulted in a multitude of benefits for learners, practitioners and providers".[42]

Outcomes for learners were measured using pre- and post-programme questionnaires to identify "distance travelled". The questionnaires were designed to capture any change in learners' attitudes towards their self-efficacy, social and civic engagement, employability and attitudes towards learning.

It is important to note that the Citizens' Curriculum was specifically developed and designed to provide learning in a number of 'life-wide' domains, rather than to measure the impact of improved adult literacy, numeracy and digital skills on life-wide domains **over and above** literacy, numeracy and digital skills.

3.   **Glasgow Life Outcome Evaluation System (GLOES) and Upshot: Scotland**

Glasgow Life is an arm's length external organisation of Glasgow City Council, tasked with delivering learning, cultural and sporting activities for the city's 600,000 residents.

The organisation uses an outcome measurement system called GLOES to show the impacts of its community learning and development (CLD) activities[43] on people's lives. These impacts include educational outcomes, but also those relating to confidence, health and wellbeing, family life, community life, social inclusion, and employment.

GLOES allows Glasgow Life to demonstrate evidence of the CLD service's contribution to a number of policy areas and to the City Council's three overarching aims, which are to develop:

● economic growth

● resilience communities, and

● a fairer and more equal city.

GLOES is a development of an earlier approach to tracking literacy and numeracy learners' achievements: LOTIS (Learner Outcome Tracking Information System). LOTIS was limited in what data it could provide in relation to outcomes in other areas of learners' lives, and there were some difficulties with the approach: it took time to analyse information and it was not possible to track learners' individual journeys over time.

GLOES consists of a series of paper forms that are completed by learners and tutors. The tutors enter the information from the paper forms onto SmartSurvey[44] so that data can be aggregated and analysed by Glasgow Life's learning and delivery teams.

Alongside GLOES, Glasgow Life have started to use web-based evaluation software called Upshot.[45] This software was developed by the Football Foundation in England and is used by several community-based organisations. While Upshot is not bespoke software, Glasgow Life consider it to be reasonably priced and simple to use.

Upshot can provide reports in a number of formats, such as maps of the city showing learning participation rates in relation to particular communities (including those identified as being 'hotspots' of deprivation). It can also demonstrate impacts against timelines broken down by individuals, groups of learners, or for whole areas of the city. The system can also be used to generate learner reports for individual learners, recording their learning activity and showing any key achievements to date.

To date, Glasgow Life has trained 150 community-based staff on the use of Upshot. Staff are required by their employer to use the system and are monitored on this as part of their work objectives. 4000 learners are registered on the system, and 1760 (44%) of these individuals live in the 15% most deprived parts of Glasgow.

In due course, Glasgow Life hope to move the GLOES system into Upshot so that all outcomes measurement is carried out using one evaluation programme.

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42 Ibid.
43 These activities encompass adult learning (including adult literacy, numeracy and digital skills), youth work and community development.

44 www.smartsurvey.co.uk
45 www.upshot.org.uk

Bibliography

Adler, A., & Seligman, M.E.P. (2016). Using Wellbeing for Public Policy: Theory, measurement, and recommendations. International Journal of Wellbeing.

Alkema, A., & Rean, J. (nd). Adult Literacy and Numeracy: An overview of the evidence. New Zealand: Tertiary Education Commission.

Batterham, R.W., Hawkins, M., Collins, P.A., Buchbinder, R., & Osborne, R.H. (2016). Health Literacy: Applying current concepts to improve health services and reduce health inequalities. Public Health Journal: Elsevier.

Benseman, J. (2016). Effective Workplace Literacy and Numeracy Programmes: A research-based reader. Auckland: Critical Insight.

Byrne, D., & Rian, S.Ó. (2018). Literacy Matters in Social and Community Life. Dublin: National Adult Literacy Agency.

Central Statistics Office. (2013). PIACC 2012: Survey Results for Ireland, from the OECD's Programme for the International Assessment of Adult Competencies. Dublin: Central Statistics Office.

Citizens' Curriculum Case Studies. (nd.) www.learningandwork.org.uk: Learning and Work Institute.

Conboy, P. (2002). The Return to Learning Initiative: Evaluation report and implementation guidelines. Dublin: National Adult Literacy Agency.

Crowther, J., Tett, L., & Edwards, V. (2001). Building Connections, Getting Involved: Measuring social capital outcomes of community learning and development. Edinburgh: The Scottish Government.

CSO (2013). PIAAC 2012 - Programme for the International Assessment of Adult Competencies: Survey Results from Ireland.

CSO Statistical Release: Adult Education Survey 2017. (2018). Cork: Central Statistics Office.

de Greef, M., Segers. M., Nijhuis, J., Fond, J.F., van Groenestijn, J., van Hoek, F., van Deursen, A.J.A.M., et al. (2015). The Development and Validation of Testing Materials for Literacy, Numeracy and Digital Skills in a Dutch Context. European Centre for the Development of Vocational Training (Cedefop). (nd). www.springer.com: International Review of Education, Journal of Lifelong Learning: Springer Science+Business Media Dordrecht and UNESCO Institute for Lifelong Learning.

Defining and Measuring the Outcomes of Non-Regulated Learning: Report of findings from provider consultation and desk research. (2016). Leicester: National Learning and Work Institute (England and Wales).

Delivering Change: Understanding the outcomes of community learning and development. (nd). Scotland: Learning Connections, Communities Scotland.

Department for Business, Innovation & Skills. (2013). Investigating the Benefits of English and Maths Provision for Adult Learners: Part 1 quantitative assessment. London: Department for Business, Innovation & Skills.

Department of Rural and Community Development supported by the Cross Sectoral Group on Local and Community Development. (2019). Sustainable, Inclusive and Empowered Communities: A five-year strategy to support the community and voluntary sector in Ireland 2019-2024. Dublin: Department of Rural and Community Development.

Department of Rural and Community Development, the County and City Management Association, and the Local Government Management Agency. (2018). Our Public Libraries 2022: Inspiring, connecting and empowering communities. Dublin: Department of Rural and Community Development.

Dorgan, J. (2009). A Cost Benefit Analysis of Adult Literacy Training. Dublin: National Adult Literacy Agency.

Duckworth, V., & Smith, R. (2019). Transformative Teaching and Learning in Further Education: Summative report for the University and College Union Transforming Lives and Communities project. London: University and College Union.

Education Scotland: (2016). How Good is the Learning and Development in Our Community? Evaluation resource, updated 2016. Scotland: Education Scotland.

Education Scotland. (nd). How Good is Our Third Sector Organisation? Evaluation resource. Scotland: Education Scotland.

European Centre for the Development of Vocational Training (Cedefop). (2019). Briefing Note: Preventing Low Skills Through Lifelong Learning. Greece: European Centre for the Development of Vocational Training (Cedefop).

Evans, S., & Eggleston, C. (2019). Time for Action: Skills for economic growth and social justice. Leicester: Learning and Work Institute.

Evidencing the Impact: A resource to support the voluntary sector to evidence the impact of adult learning. (2015). Glasgow: Learning Link Scotland.

Fox, N., & Fieldsend., G. (2018). FinALE "How to Invest": Financial Indicators for Adult Education. www.financing-adult-learning.eu/: Financing Adult Learning in Europe, c/o European Association for the Education of Adults.

Feeley, M., & Hegarty, A. (2013). Distance Literacy: Filling the Gaps in a Time of Recession: An evaluation of NALA's Distance Learning Service in 2012, Final Report. Dublin: National Adult Literacy Agency.

Feinstein, L., Budge, D., Vorhaus, J., & Duckworth, K. (2008). The Social and Personal Benefits of Learning: A summary of key research findings. London: Centre for Research on the Wider Benefits of Learning, Institute of Education.

Forgeard, M.J.C., Jayawickreme, E., Kern, M., & Seligman, M.E.P. (nd). Doing the Right Thing: Measuring wellbeing for public policy. International Journal of Wellbeing.

Fujiwara, D. (2012). Valuing the Impact of Adult Learning: An analysis of the effect of adult learning on different domains in life. Leicester: National Institute of Adult Continuing Education (England and Wales).

Further Education and Training Strategy 2014-19. (2014). Dublin: SOLAS.

5-Year Basic Skills Strategy: 2020-2024. (nd). The Netherlands: Ministry of Education, Culture and Science.

Gardner, A., & Witkowskyj, C. (2014). Measuring Learning Progress in Literacy and Essentials Skills: Recommendations for literacy stakeholders and government. Canada: Learning Progression Measures Project, Bow Valley College, Alberta.

Getting Skills Right: Future-ready adult learning systems. (2019). Paris: Getting Skills Right, OECD Publishing.

Gibney, S. (2019). Literacy Matters for Health and Wellbeing: Literacy, low education, and health and wellbeing. Dublin: National Adult Literacy Agency.

Glasgow's Learning Outcomes Evaluation System (in development). Glasgow: Glasgow Life.

Healthy Ireland: A framework for improved health and wellbeing 2013-2025. (2013). Dublin: Department of Health.

Healthy Ireland Outcomes Framework: The national framework for action to improve the health and wellbeing of the people in Ireland. (2018). Dublin: Department of Health.

Healthy, Wealthy and Wise: Implications for workforce development. (2019). Leicester: National Learning and Work Institute.

Hegarty, A., & Feeley, M. (2019). Enabling Intergenerational Learning: Evidence from a study of family literacy practices in Irish Education and Training Boards (ETBs). Dublin: National Adult Literacy Agency.

Hutchings, J., Yates, B., Isaacs, P., Whatman, J., & Bright, N. (2013). Hei Ara Ako ki te Oranga: A model for measuring wellbeing outcomes from literacy programmes. New Zealand: Ako Aotearoa, National Centre for Tertiary Teaching Excellence.

Invest in Adult Learning: Executive summary of the outcomes of the FinALE project. (2018). www.financing-adult-learning.eu/: Financing Adult Learning in Europe, c/o European Association for the Education of Adults.

Ipsos MORI, the Centre for Mental Health, & Lawson, L. (2018). Community Learning Mental Health Research Project: Phase two evaluation report. London: Department for Education.

Ireland's National Skills Strategy 2025. (2016). Dublin: Department of Education and Skills.

Jackson, C., & Schaetti, M. Editor: Gardner, A. (2013). Measurement and Assessment in Adult Literacy and Essential Skills: A critical literature review. Canada: Learning Progression Measures Project, Bow Valley College, Alberta.

Jeantheau, J-P. (nd). IVQ: More than a national survey, more a basis for an indicators net. France.

Jurmo, P., with research and editing help from Risley-Schroeder, A., Rosen, D., Isserlis, J., Krol-Sinclair, B, Cruz., Sheppard, R., Peters, C., Thompson, J., Broderick, E., Bailo, S., & Jurmo, E. (2019). Greening: U.S. Adult Basic Skills Efforts: What eco-partners and adult educators can do together: A can-do guide of the Open Door Collective. www.opendoorcollective.org: Open Door Collective.

Learner Detail Form. (nd). Ireland: Limerick & Clare Education and Training Board.

Learning, Work and Health: The next 70 years. (2018). Leicester: National Learning and Work Institute.

Literacy Now (2019): Where to from here? Edited by Mark, R. (2019). Dublin: National Adult Literacy Agency.

Literacy and Work: Thematic paper. (2019). Dublin: National Adult Literacy Agency.

Literacy Changes Lives: NALA 2020 pre-budget submission. (2019). Dublin: National Adult Literacy Agency.

Literacy for Life, Literacy for All: Background paper, working draft. (2019). Dublin: National Adult Literacy Agency.

Macleod, G., & Tett, L. (2019): 'I had some additional angel wings': Parents positioned as experts in their children's education. International Journal of Lifelong Education.

Manninen, J. (nd). Wider Benefits of Learning within Liberal Adult Education System in Finland. Finland: University of Eastern Finland.

Mapping the Learning Journey. (2005). Dublin: National Adult Literacy Agency.

McSkeane, Dr. E. (nd). Initial and Ongoing Assessment of Adult Literacy and Numeracy at NFQ levels 1-3: Guidelines, toolkit and research report. Dublin: SOLAS and ETBI.

McSkeane, L. (2006). Revised Evolving Quality Framework for Adult Basic Education (ABE): User guide. Dublin: National Adult Literacy Agency.

Meadows, P., & Metcalf, H., (National Institute of Economic and Social Research). (2007). Evaluation of the Impact of Skills for Life Learning: Longitudinal survey of learners, wave 3. Nottingham: Department for Education and Skills.

Measuring Soft Outcomes: A basic guide. (2008). Glasgow: Hall Aitken.

Measuring the Economic Impact of Further Education. (2011). London: Department for Business, Innovation & Skills.

Milton, B., Attree, P., French, B., Povall, S., Whitehead, M., & Popay, J. (2011). The Impact of Community Engagement on Health and Social Outcomes: A systematic review. Oxford University Press and Community Development Journal.

Monitoring Learning Outcomes of Adult Learning Programmes: A review of European best practices on monitoring instruments. (nd). Paris: OECD Publishing.

Monitoring Participation and Impact of Basic Skills' Trainings: International overview. (2019). Utrecht: OECD workshop presentation.

Monitoring Participation in Adult Learning Programmes: A review of European best practices on monitoring instruments. (nd). Paris: OECD Publishing.

Motschilnig, R. (2012). Wider Benefits of Adult Education: An inventory of existing studies and research. www.dvv-international.de: Adult Education and Development Journal.

Murphy, H., Bennett, L., Klenk, H., Ray, K., & Stevens, C. (2018). Step Up: Trialling new approaches supporting low-paid workers to progress their careers. Leicester: National Learning and Work Institute.

NALA Student Development Fund: Annual report 2018: An overview of how the fund was used and responses from adult literacy students on a number of topics. (2019). Dublin: National Adult Literacy Agency.

NALA Submission to the FET Strategy Consultation: May 2019. (2019). Dublin: National Adult Literacy Agency.

OECD. (2019). Improving the Quality and Monitoring of Basic Skills Education for Adults: SRSS/OECD framework grant agreement (the Netherlands). OECD.

OECD. (2019). Improving the Quality of Basic Skills Education for Adults: A review of European best practices on quality assurance. OECD Publishing.

Pathways to Work 2016-2020. (2016). Dublin: Department of Employment Affairs and Social Protection.

Peter Sowerby Foundation, The Reading Agency, Office for Public Management Limited (OPM), Association of Senior Children's and Education Librarians (ASCEL), BookTrust, Arts Council England, Society of Chief Librarians (SCL), The Publishers Association, CILIP (The library and information association), National Literacy Trust, and Scottish Library & Information Council. (2017). Reading Outcomes Framework Toolkit: A toolkit to help you understand, demonstrate and improve the impact of your activities to encourage reading for pleasure and empowerment. United Kingdom.

Plant, H. (2015) Capturing the Wider Outcomes of Community Learning: Final report. Leicester: National Institute of Adult Continuing Education (England and Wales).

Programme Learner Support System (PLSS): A new data infrastructure in Ireland. (2019). Presentation by Dr Inez Bailey, National Adult Literacy Agency.

Quality and Qualifications Ireland: Annual report. (2017). Dublin: Quality and Qualifications Ireland.

Reder, S. (2010). Adult Literacy Development and Economic Growth. Washington DC 20006: National Institute for Literacy.

Reder, S. (2012). The Longitudinal Study of Adult Learning: Challenging assumptions. Canada: The Centre for Literacy.

Report 2017, NALA Student Days. (2017). Dublin: National Adult Literacy Agency.

Research and Information Service Briefing Paper: Outcomes-based government. (2016). Northern Ireland Assembly.

Samson, M., van Katwyk, S., Fröling, M., and Ndoro, R., with Meintjes, C., Buts, L., & Renaud, B. (2015). Methods of Measuring the Impacts of Social Policy in Political, Economic and Social Dimensions. Switzerland: United Nations Research Institute for Social Development (UNRISD).

Scottish Community Development Centre. (2007). LEAP: A manual for learning evaluation and planning in community learning and development. Edinburgh: The Scottish Government.

SOLAS and ETBI. Programme and Learner Support System (PLSS). www.qqi.ie.

Stevens, C., Egglestone, C., Stevenson, A., & Patel, A. (2019). Social Metrics: Measuring the outcomes of non-accredited learning. Leicester: National Learning and Work Institute.

Stevenson, A., Robey, C., & Downes, S. (2016). Citizens' Curriculum: Phase 2 project report. Leicester: Learning and Work Institute.

Stevenson, A., Robey, C., & Pagett, B. (2015). Towards a Citizens' Curriculum: Project report on the phase 1 pilots. Leicester: National Institute of Adult Continuing Education (England and Wales).

The Development of a Distance Travelled Tool for the Social Inclusion and Community Activation Programme (SICAP): Interim summary document. (2019). Dublin: Pobal.

Tyler, J. (2005). The General Educational Development (GED) Credential: History, current research, and directions for policy and practice. Pp. 45-84 in Review of Adult Learning and Literacy, Connecting Research, Policy and Practice, Volume 5, edited by J. Comings, B. Garner, & C. Smith. www.NCSALL.net: National Center for the Study of Adult Learning and Literacy.

UNESCO Strategy for Youth and Adult Literacy (2020-2025): Draft outline for on-line   forum consultation. (2019). UNESCO.

U.S. Adult Literacy Programs: Making a difference: A review of research on positive outcomes achieved by literacy programs and the people they service. (2003). New York: ProLiteracy America, U.S. Programs Division of ProLiteracy Worldwide.

Westell, T. (2005). Measuring Non-Academic Outcomes In Adult Literacy Programs: A literature review. Canada.

What's in it for me? The benefits of engaging in adult literacy learning in Ireland. (2018). Dublin: National Adult Literacy Agency.

Whitten, Dr. D. (2018). Enhancing and Measuring Adult Literacy and Numeracy Progress: Exploring practices, outcomes measures, and quality indicators: Full report. New Zealand: Ako Aotearoa.

Wider Outcomes: Planning and capture tool: Guidance document. (2013). Leicester: National Institute of Adult Continuing Education (England and Wales).

Websites

Open Door Collective: www.opendoorcollective.org

Pobal: https://www.pobal.ie/programmes/social-inclusion-and-community-activation-programme-sicap-2018-2022/

The National Adult Literacy Agency (NALA) is a charity and membership-based organisation. We work to support adults with unmet literacy and numeracy needs to take part fully in society and to have access to learning opportunities that meet their needs. NALA does this by raising awareness of the importance of literacy, doing research and sharing good practice, providing distance learning services and by lobbying for further investment to improve adult literacy, numeracy and digital skills.

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