

Evidence review: **What works to improve adult basic skills?**

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Summary

- Adult basic skills programmes can have a positive impact on a range of outcomes, including self-confidence, employability skills, social integration and productivity improvements for businesses.
- Behavioural interventions that provide learners with encouragement, social support and the opportunity to reflect on why they value learning, have been found to improve persistence and achievement.
- The use of ICT and online learning can be effective in improving learner motivation, engagement and persistence.
- Evidence on the effects of financial incentives on basic skills learning is mixed, as is the evidence on effective duration of learning. Longer courses tend to be delivered more efficiently than shorter ones due to the fixed start-up costs.
- Engaging adults in basic skills programmes is one of the most challenging aspects of delivering effective provision. Effective marketing techniques (using motivations that are specific to different learner groups), referral networks and supportive enrolment processes all play an important role.
- Partnership working between education providers and agencies working with various client groups in the community can help address barriers to engagement with basic skills learning.
- Provision must be flexible and adapt to the changing life circumstances and priorities of learners over time, and informal and formal measurement of progress made by learners should be acknowledged.
- Practical and social support can be effective in supporting adults to persist with learning, as can one-to-one support from a named and trusted advisor.

- Embedded or contextualised learning that is relevant to learners' lives enables more tailored and successful learning.
- It is important to understand employers' motivations for engaging in workplace learning programmes, raise their awareness of the positive impact of raising employees' basic skills on business outcomes and provide coordinated support to help employers access the most appropriate training.

Background

More than 5 million adults lack both functional literacy (below level 1) and numeracy (below entry level 3)¹; an estimated 11.5 million adults do not have basic digital skills²; and one in five adults do not have basic financial capabilities.³ Around 850,000 people have English for Speakers of Other Languages (ESOL) needs.⁴ At the same time, participation in adult Maths and English is falling.⁵

The Digital Strategy also sets out an ambition for everyone to have the core basic skills they need to fully participate in society. As part of this, a new basic digital skills entitlement will be funded through national and devolved Adult Education Budget (AEB). From 2019/20, the six Mayoral Combined Authorities (MCAs) and the Greater London Authority (GLA) will have new responsibilities for ensuring that adult learners, who are eligible for funding, have access to appropriate education and training.⁶

This review draws on the best available evidence on basic skills approaches to look at what types of approach are most effective and, where possible, most cost-effective. We also use a wider range of evaluations to set out the issues that should be taken into consideration when delivering basic skills programmes.

Much of the literature has advocated the general benefits of adult learning rather than analysed what works in terms of different approaches. For the delivery of adult basic skills training to be successful, programmes need to motivate adults to take part, convey the benefits of basic skills effectively, and encourage adults to persist in the programme.

What is basic skills provision?

Our definition of adult basic skills includes literacy, numeracy, (basic) digital skills and ESOL skills. Basic skills learning takes place in a variety of settings, including formal provision from a FE college or training provider, as well as workplace learning programmes, community learning and family learning.

This review explores provision in these settings as well as issues of motivation, outreach and engagement (of both learners and employers), learner progression and online delivery methods.

¹ 2011 Skills for Life Survey

² Maguire, A and Lyons, C (2017) Basic Digital Skills UK Report 2017, Ipsos MORI

³ Money Advice Service

⁴ Source: 2011 Census

⁵ Source: Department for Education, 2019

⁶ For further information see <https://www.gov.uk/guidance/adult-education-budget-aeb-devolution>

Quality and nature of the evidence

Much of the literature on what works to improve adult basic skills highlights the lack of robust evidence. Brooks et al's (2001) analysis of 1224 students' pre and post-tests for literacy skills claims this is the first study in the English-speaking world to provide reliable evidence of progress in adult literacy based on an adequately representative national sample.⁷ This is backed up by Beder's 1999 review of adult basic skills evaluations in the US, which found that in between 1974 and 1999 only nine credible studies had been conducted.⁸ More recently, in 2015, an OECD working paper reported that describing the benefits of participation in adult basic skills programmes is difficult because of the methodological problem that much of the research does not use a control group, that is, it cannot compare the proficiency gain of programme participants with gains made by comparable groups of non-participants or programme drop-outs.

This review draws on five studies that cover a total of 26 different programmes evaluated through RCTs. They focus on community based ESOL provision, workplace literacy programmes in the US, the use of incentives and behavioural interventions to encourage participation and achievement in basic skills learning; and an evaluation of adult education in US Welfare to Work programmes. In addition, the review includes a quasi-experimental study, which used a matched comparator group to create a 'counterfactual' to test the difference between the group that underwent 'treatment' and the group that did not, in order to assess the level of impact. This study evaluated the impact of using ICT products to facilitate the learning of basic skills.

At the next level down in terms of evidence quality is the large majority of evidence in this review which uses 'before and after' designs to measure outcomes, without a control group to measure progress against. Fifteen studies in this review use this methodology, covering 25 different types of approach to basic skills provision, including (but not limited to): family learning; FE College provision; community adult learning; workplace learning, and basic skills education in prisons. These studies focus on recording participant skills levels via assessment test scores, and attitudes towards learning via questionnaires (with learners and often also tutors or managers), before and after the learner participates in basic skills learning. This allows researchers to track changes between pre- and post-course test results and questionnaires to estimate whether, and by how much, skills and/or attitudes towards learning have improved. These studies also gathered evidence from qualitative research, thereby using a mixed methods approach. Qualitative data included that from interviews with learners, tutors and employers, and observations, and was used to correlate successful outcomes with particular aspects of provision. Finally, some of these studies also collected data on the number of participations in programmes and qualifications gained by learners as a way to measure 'success'.

Beyond these, this review includes the six studies that searches returned which gather qualitative evidence only, from in-depth interviews with learners and providers, to explore issues such as how to carry out effective engagement of basic skills learners, and the features

⁷ Brooks et al (2001) *Assembling the fragments: A review of research on adult basic skills*

⁸ Beder, H. (1999) *The Outcomes and Impacts of Adult Literacy Education in the United States*, The National Center for the Study of Adult Learning and Literacy, Cambridge, MA

of effective provision. These include qualitative case-study approaches with a small number of providers.

Finally, we also draw on four studies that carry out analysis of secondary data sets, such as national administrative data for publicly funded Skills for Life provision, and meta-analyses of reviews of studies already completed.

The next two sections focus on the effectiveness of different basic skills approaches and focus solely on approaches that have been robustly evaluated with the use of counterfactuals.

How effective are basic skills interventions?

This section considers the effectiveness of basic skills interventions as measured primarily by skills gains outcomes, but also achievement and qualification rates, future earnings, learners' self-reported basic skills improvements, and other self-reported outcomes such as changes in self-confidence, social skills and attitudes towards learning. The evidence suggests that the degree of effectiveness of basic skills approaches depends on which outcome measures are used.

Although few in number, studies which have measured the impact of basic skills programmes on adults' basic skills levels have shown that they can have a positive impact. This was the case for the Community ESOL programme⁹, and the US National Workplace Literacy Program¹⁰, which measured changes in learners' basic skills by using pre- and post-intervention skills assessment tests and generally found significant improvements in learners' basic skills. However, a 2004 review¹¹ of RCTs of pedagogy in adult literacy and numeracy programmes found that of all experimental research in the field since 1980, only six studies out of a total of 36 trials showed a statistically significant positive outcome for the pedagogical intervention. Such pedagogical interventions included the use of modified comprehension learning strategies instead of conventional methods of teaching with material presented on a blackboard and use of reciprocal teaching. Further evidence to the contrary comes from the Longitudinal Study of Adult Learning which examined the long-term impacts of Adult Basic Skills program participation in the US and found no relationship between proficiency change and participation in adult basic skills programs. This study did, however, find significant and financially substantial impacts of basic skills programme participation on earnings growth. Participants in programmes had higher future earnings as a result of participating, although this impact typically took several years to develop after participation.

Other basic skills interventions have been found to have a positive impact on achievement rates. For example, the ASK behavioural interventions found significant improvements in achievement rates in the treatment groups. However, there are also studies that show minimal improvement in this outcome measure, such as the evaluation of adult education in welfare-to-work programs in the US, which found that, although General

⁹ Learning and Work Institute (2018) *Measuring the impact of community based English language provision – findings from a randomised controlled trial*, Ministry of Housing, Communities and Local Government

¹⁰ Moore et al (1998) *Addressing literacy needs at work: Implementation and Impact of Workplace Literacy Programs*, US Department of Education

¹¹ Torgerson et al (2004) *Adult Literacy and Numeracy interventions and outcomes: a review of controlled trials*

Education Diploma (GED) receipt was higher in the program group than the control group, it was still only 11% in the program group. However, it could be argued that GED was too high a level of attainment for those with low skills levels to realistically achieve over the duration of a program.

Studies show more significant and consistent improvements in learners' self-confidence and self-reported improvements in basic skills, employability skills and social integration. The self-reported outcomes evidenced in the Community ESOL intervention and the US National Workplace Literacy Program include improved communication skills, self-confidence, team work skills, and confidence to undertake everyday tasks involving basic skills such as booking health care appointments.

Other measures of programme success include learners' self-reported increase in engagement in basic skills-related practices, and more positive views towards and interest in learning and training. These outcomes were evidenced most strongly in the analysis of Longitudinal Study of Adult Learning in the US.¹² This study showed a strong positive relationship between programme participation and changes in literacy and numeracy practices, such as reading books and using maths at home. Learners in the US National Workplace Literacy Program also reported engaging more frequently in certain literacy tasks at home.

What types of basic skills approach are likely to be effective?

Behavioural interventions that provide learners with encouragement, social support and the opportunity to reflect on why they value learning, have been found to improve persistence and achievement in basic skills learning. The ASK behavioural interventions¹³ found that weekly text messages of encouragement sent to adult learners enrolled on maths and English courses improved attendance rates by 22% and achievement rates by 16%. In a trial of a social support intervention, updates on the learners' progress were texted to learners' friends and family and resulted in an improvement in learners' attendance and achievement rates. Combining both of these methods, an intervention that incorporated both weekly text messages of encouragement to learners and updates to their social supporters improved attainment rates by 24%. Further, a short writing exercise, in which learners reflected on their personal values and why they are important to them, improved attainment in maths and English courses to a similar degree.

The use of ICT and online learning can be effective in improving learner motivation, engagement and persistence. A US evaluation of adult basic education programmes that used ICT products to facilitate learning of basic skills¹⁴ found that although impacts on skills assessment results were mixed, the majority of instructors and students had positive experiences of using ICT. Instructors reported that the use of the products enabled them to differentiate instruction to fill gaps in basic literacy and math skills across a wide range of students in ways that were not possible without the products. In addition, a majority of

¹² Reder (2014) *The impact of ABS Program Participation on Long-Term Literacy Growth*, US Department of Education

¹³ Hume et al (2018) *Improving engagement and attainment in maths and English courses: Insights from behavioural research*, Department for Education

¹⁴ Murphy et al (2017) *Evaluating Digital Learning for Adult Basic Literacy and Numeracy*, SRI Education

students reported that they enjoyed using ICT (suggesting a positive impact on engagement and persistence) and that it helped them improve their math and reading skills. Further, they reported that it gave them confidence that they could use online resources to learn on their own without an instructor's direct involvement. A majority of students also reported that they used the products to continue learning outside of class time.

However, the same study found that one-fifth of students did not enjoy using ICT to learn, and preferred working directly with instructors over learning online. The authors suggest that depending on the learning scaffolds embedded in the ICT products, and the immediacy of instructors' support, some students may become stuck in a digital learning environment and experience frustration. For such reasons, particularly for learners with the lowest skills levels, blended and hybrid models, with tutors delivering at least half of the instruction was suggested as most effective for basic skills programmes.

Evidence that financial incentives have a positive effect on basic skills learning is mixed. Strong support for the value of financial incentives comes from the ASK behavioural intervention trial which found that cash incentives for attending numeracy and literacy classes in children's centres improved attendance by 73%. Further, a 'buddy incentive', that is, incentives that were only awarded to learners where both buddies achieved the attendance target, achieved higher attendance than those in the individual incentive group, showing that an incentive that incorporates a social dimension can be even more effective. However, in contrast, a trial of incentives to improve attendance at adult literacy classes¹⁵ found that financial incentives had no effect on learner's attainment and a detrimental effect on attendance. The authors drew attention to other research which suggests that rewarding activities which are inherently rewarding is demotivating, and that rewards which are contingent on engagement have a negative effect on engagement.

Findings on the most effective duration of learning are mixed. The US evaluation of adult basic education in Welfare-to-Work programmes¹⁶ found that during participants' first year of participation in basic education, additional months of participation were not associated with higher literacy test scores. However, after a year of participation, additional months in adult education appeared to substantially increase test scores, suggesting that a threshold level of participation of approximately one year is needed to achieve meaningful skills gains. However, increases in maths skills were associated with additional months of basic education during the first six months only. After that, no further increases in these skills were found, although this could reflect limitations in the maths skills being taught in the classes. The US National Workplace Literacy Program study found that increased teaching time (the site that received the most received an average of about 43 hours of instruction) was linked to overall programme effectiveness across a broad range of outcomes, including workers' self-reported ability to use maths and how often they read various materials at home. With a similar number of teaching hours, the community ESOL intervention study¹⁷ found 'strong and significant impacts' across all of the English proficiency domains after 66 hours of instruction over a

¹⁵ Brooks et al (2008) *Randomised controlled trial of incentives to improve attendance at adult literacy classes*, Oxford Review of Education 34:5 493-504

¹⁶ Bos et al (2002) *National Evaluation of Welfare-to-Work Strategies, Improving Basic Skills: The Effects of Adult Education in Welfare-to-Work Programs*, US Department of Education

¹⁷ Learning and Work Institute (2018) *Measuring the impact of community based English language provision – findings from a randomised controlled trial*, Ministry of Housing, Communities and Local Government

period of 11 weeks. Analysis of the Longitudinal Study of Adult Learning found that income premiums of participants in basic skills programmes were larger with more intensive participation, with a threshold of around 100 hours.

The gains from basic skills programmes are greater for younger learners and, in ESOL programmes, for groups with higher initial qualification levels. Although based on single studies only, the Community ESOL intervention trial found that higher educational attainment was a significant predictor of improvement in proficiency, which could indicate a familiarity with class-based study, or aptitude to learn. Meanwhile, the ASK behavioural interventions found that increasing age was associated with lower exams scores, and that learners from ethnic minority groups performed, on average, less well than white learners.

How cost-effective are basic skills approaches?

There is limited evidence on the cost-effectiveness of basic skills approaches. Although several studies include information on programme costs, these are generally from over a decade ago, and the majority of studies do not include such information. Nevertheless, the evidence that does exist includes:

Longer courses tend to be delivered more efficiently than shorter ones due to the fixed start-up costs. An evaluation¹⁸ of a family literacy programme in England covered 74 family literacy courses in 42 Local Education Authorities. The courses were either short courses (lasting 30-49 hours) or standard courses (72-96 hours). Estimated costs per participant-learning hour for the programmes evaluated were £7.39 for the short courses and £6.84 for the standard ones. These were calculated by dividing the average available funding per course by the number of participants and by the contact time. The implication is that longer courses provide better value for money than shorter ones, a result that is primarily related to fixed start-up costs being spread over a longer time period. However, the authors of this study note that this does not take into account that the potential opportunity costs, particularly to the parents and children, may be greater for the longer courses. The study also found that the amount of progress made by learners on short courses was slightly more than that made on standard courses. However, average scores of those on standard courses were already high at the beginning of the course, leaving less room for improvement (ceiling effect). As another measure of effectiveness, 56% of parents on short courses and 71% of parents on standard courses achieved a qualification.

Although one study showed a model of providing subsidised training for low-skilled workers to be inefficient, case studies have reported efficiency improvements for employers from workplace training. A review of research¹⁹ presents findings from a longitudinal study²⁰ that tracked 53 workplaces that hosted Skills for Life courses subsidised by the Learning and Skills Council. The study found that the model of providing top-down provision on a workplace-specific basis was very expensive as a result of the multiple

¹⁸ Swain et al (2013) *Learning literacy together: the impact of Family Literacy on parents, children, families and schools*, NRDC

¹⁹ Vorhaus et al (2011) *A review of research and evaluation on improving adult literacy and numeracy skills*

²⁰ Wolf et al (2010) *The rise and fall of workplace basic skills programmes: lessons for policy and practice*

contracts for each course operated, the small size of the groups and the heavy fixed costs. In terms of outcomes, learners reported high levels of satisfaction, but were found to have made at best only small gains in literacy, with no discernible effect on productivity, suggesting that this model of literacy training is an inefficient one.

However, an evaluation of Skills for Life programmes²¹ reports on several case studies that suggest efficiency gains for businesses whose employees engage in workplace basic skills learning programmes. The report found that by improving the skills of existing drivers, one business has negated the need for on-site accommodation for new foreign drivers, saving £200,000; the initiative has also reduced the number of foreign drivers procured by foreign agencies, saving £248,000 a year in agency and interpreter costs. In another case study, Norfolk County Services increased their staff satisfaction by 20 per cent. Feedback from staff surveys indicated that support with learning and development of literacy and numeracy skills played a key part in this improvement. Finally, Skills for Life helped VT Shipbuilding staff adapt to its new state-of-the-art facility and increased productivity by 20 per cent.

Some older studies from the 1990s provide estimates of the cost of provision per learning qualification achieved. A review of research²² refers to the Further Education Funding Council (FEFC) programme, which in 1996/97 funded about 205,000 basic skills learners at £750 per head, with an estimated cost of £900 for each qualification achieved. For England and Wales, the only other estimate of the cost of provision found by the review was the National Foundation for Educational Research evaluation of Basic Skills Agency family literacy programmes.²³ Considering only direct costs (that is, excluding development and research costs), it was estimated that in these courses the cost per participant-learning hour was £6.55.²⁴ This estimate covered not just the parents but also the children who participated, and younger siblings being minded in the crèche which every family literacy course routinely provided. Multiplied up by the nominal 96 hours of course time, this represents £629 per parent. Since 95 per cent of parents achieved a literacy qualification this would represent £663 per literacy qualification.

A US study from 1999 found that calculated costs per learner varied widely depending on whether the cost of provision was included in calculations. The US Department of Education's evaluation of adult education in Welfare-to-Work programs found the average spend of the Welfare Department on a month of participation of one person in the programme ranged from US\$ 54-257 in 1999. This included the cost of providing activities such as classroom instruction. The reason for such variation included the different ways in which programmes were implemented: some programmes referred sample members to community providers for basic education services, but did not provide any additional funding to these generally publicly funded programmes, whereas for other programmes the welfare department paid for the service provided through formal contracts with education providers.

²¹ National Audit Office (2008) *Skills for Life: Progress in Improving Adult Literacy and Numeracy*, NAO

²² Brooks et al (2001) *Assembling the fragments: A review of research on adult basic skills*

²³ Brooks, G et al (1996) *Family literacy works: the NFER Evaluation of the Basic Skills Agency's demonstration programmes*

²⁴ Figure cited by this study have been adjusted for inflation to 2018 costs using the Bank of England's inflation calculator which can be accessed at: <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>

There has been some discussion of costs and benefits in using ICT and online learning, but apparently no attempt to attach actual figures. A review of research²⁵ considers the use of ICT in basic skills learning to be one of the most problematic areas when discussing costs and benefits, partly because the cost of personal assistance required by the learner varies so much between individual learners. A 2014 evidence review²⁶ finds that none of the research included in their learning technology evidence base reported on the cost-effectiveness of the adult basic skills programmes described, either in and of themselves, or in comparison to traditional face-to-face teaching methods.

Interventions that use text messages to encourage learners' attendance and achievement were found to be cost-effective methods. The ASK behavioural interventions trials found that the estimated costs of the text message intervention in FE colleges was less than £5 per learner, including the cost of the messages and staff time. An intervention that texted parents to explain how easy the enrolment process was found that at £10 per additional enrolment for the most effective message, it was a cost-effective way to increase enrolment.

Delivering basic skills interventions

This section draws on the findings from the evidence that offer lessons for the design and delivery of basic skills interventions.

Recruiting learners

Engaging adults in basic skills programmes is one of the most challenging aspects of delivering effective provision. Often adults with low basic skills levels will have done badly at school and have a negative perception of education; they may not be aware of or recognise a need to improve their basic skills, and even if aware, are embarrassed to admit it. Initial motivation is therefore a serious obstacle. Even for those interested in tackling their weaknesses, it may be difficult to translate that interest into action.

Effective marketing is an important part of effective engagement. Evidence suggests that the most effective messaging uses specific motivations that are relevant to each learner group as hooks. For example, ESOL learners' key motivations have been found to include the desire to find work or help them in their current job, help their children, integrate into their local community, communicate on behalf of their own community, and improve access to public services such as transport and healthcare. Numeracy learners, on the other hand, have been found to feel generally capable of getting by with the maths skills they already had; the Effective Teaching and Learning of Numeracy study²⁷ found that only one-fifth of learners had enrolled on the course because they felt they lacked skills needed in their everyday lives. This suggests any marketing campaign should not focus on the motivation of using basic skills more effectively in the everyday context. Instead, wanting to prove something to themselves, become more confident, or be able to help their children, may be more effective hooks. Other intrinsic motivations cited by learners in various studies include overcoming embarrassment, and regaining confidence lost at school.

²⁵ Brooks et al (2001) *Assembling the fragments: A review of research on adult basic skills*

²⁶ Litster, J. (2014) *Learning technology in adult English, maths and ESOL/ELT provision: an evidence review*

²⁷ Coben (2007) *Effective Teaching and Learning: Numeracy*, NRDC

Additionally, research has identified common barriers that learners face to engaging in basic skills, which must be addressed by marketing and outreach activities in order to provide reassurance. These barriers have been found to include meeting new people, the reaction of friends, a lack of confidence in their ability to successfully complete a course, concern that it might be like school, and the stigma of being a basic skills learner. The latter suggests that names of courses, such as 'numeracy' or 'basic maths' may be off-putting. Suggested alternatives include 'managing money better', 'keeping up with the kids and 'maths in your home'. Furthermore, research has found that some adults lack awareness of their own basic skills weakness, meaning that outreach and marketing activities need to make potential learners aware of their learning needs, that is, the implications of having weak basic skills. Regardless of the messaging decided upon, it is considered to be crucial to test the effectiveness of communications before settling on one message. For example, the ASK behavioural interventions study found that a message highlighting the ease of signing up to a course outperformed the message of being better able to support your child's education, which was expected by the trial partners to be most effective.

It is important to utilise a variety of outreach activities to recruit participants to programmes. This could include posters, leaflets, word of mouth within communities and providers' existing networks and partnerships, and the provision of short, 'taster' courses that reflect learners' interests and encourage them to engage in longer courses. The literature also highlights the potential for former and current learners to act as 'learning champions' to attract new learners, or support new learners directly, such as in the role of volunteer adult learner supporters. In workplace learning, evidence highlights the importance of labour unions, employers, managers and colleagues in motivating low-skilled workers to take up basic skills education. For example, a study of the Upskilling Partnerships Programme in New Zealand²⁸ found that proactive 'shoulder tapping' by managers or key office staff was a particularly effective method of recruiting workers to a basic skills training programme.

Referral networks can play a key role in recruiting participants on to programmes. Research highlights the key role that partnership working has to play in engaging hard to reach groups, including developing referral pathways from other services, such as employment support and financial advice services. Providers who are more strongly embedded in their local community and are well-networked tend to be able to do this most effectively. Providers would therefore benefit from developing and improving current partnerships with community and voluntary sector organisations which have already built up relationships with potential learners.

A supportive enrolment process can also facilitate successful recruitment. The point at which an adult signs up to a course has been found to be one of the riskiest in terms of likelihood of disengagement. It is therefore suggested that making the process of enrolment as easy and encouraging as possible is key. Enablers identified in the literature include: ensuring the first point of contact when joining the course is knowledgeable, friendly and welcoming; the provision of pre-course guidance; and the opportunity to meet tutors and other students before starting a course. The ASK behavioural intervention trial of SMS messages sent to potential learners that emphasised how easy it is to sign up to a course showed a positive impact on the number of sign ups.

²⁸ Department of Labour, New Zealand (2010) *Upskilling Partnership Programme, Evaluation Report*, Department of Labour

Encouraging persistence

For adults with busy working and family lives it is often hard to find space for learning and drop-out rates of programmes can be high, suggesting that encouragement of persistence with learning, as well as initial engagement, is key.

Provision must be flexible and adapt to the changing life circumstances and priorities of learners over time. Learners in community adult provision have been found to be particularly likely to experience turbulence and unpredictable change in their lives, with shifting priorities which lead to learners dipping in and out of learning. Providers need to therefore be flexible and sensitive to learners' changing circumstances, including practical and time constraints, which can temporarily affect their ability to participate. It is suggested that providers need to remain in touch with and support learners who break off from learning, perhaps with distance learning, and entice them back to complete the programme.

Informal and formal measurement of progress made by learners should be acknowledged. Enabling learners to gain formal and informal recognition and accreditation for their learning, taking into account what learners themselves perceive as success, can support learner confidence and encourage persistence with learning. By acknowledging gains already made, flexible and innovative assessment can support learner persistence when adults 'drop out' of formal programmes. Research into workplace learning schemes suggests that employers should reward and publicly recognise learner success in order to motivate learners to persist with learning and demonstrate the benefits of learning to the employer. Similarly, a study of family literacy programmes²⁹, suggested that 'celebration assemblies' where children get to see their parents gain certificates for achievements, was one example of how milestone events and achievements can be publicly celebrated. Linked to the theme of how to define achievement, a study of the impact of Skills for Life provision³⁰ found that some providers suggested not setting targets for participation and achievement for provision for groups that are challenging to access, as these learners can be seen as a risk to achieving targets as they are less likely to attend regularly and meet targets as quickly, despite being in the most need of provision.

Learning with the use of ICT or online tools can improve learners' motivation to persist with learning. Mobile technologies, including applications for smart phones, online interactive games and social media, have been found to motivate learners, particularly younger adults who are more familiar with the technology. Learners who find the use of pen and paper defeating, as it reminds them of negative school experiences, have been found to prefer the use of ICT to learn. Learners have also been found to value the opportunity for instant feedback from online quizzes and games, and greater flexibility for learners who find it easier to engage in self-study at home. The latter may support retention, inclusion of groups such as adults with disabilities, and improve learners' confidence in using digital skills on their own without a tutor's direct involvement. Furthermore, a software programme can provide a learner with an instant assessment of the level of some skills, such as numeracy and writing, and so provide the learner with a more individualised learning plan. Case study participants in the

²⁹ Swain et al (2013) *Learning literacy together: the impact of Family Literacy on parents, children, families and schools*, NRDC

³⁰ Rhys Warner and Vorhaus (2008) *The Learner Study – The impact of the Skills for Life strategy on adult literacy, language and numeracy learners*, NRDC

www.writeon.ie study³¹ considered individualised learning plans to help learners remain more motivated than they might otherwise be in a class of learners with disparate needs who are being taught the same course content.

The intensity of learning can also impact on effectiveness, with the nature of the impact depending on the learning context. For learning that employs a classroom mode of delivery, it appears that too high intensity can have a negative impact on attendance and persistence. The Pathfinder Extension Programme study³² found that highly intensive courses (60 hours of teaching over no more than four weeks) performed less well on educational impacts than less-intensive provision, including learners being less likely to achieve a qualification and less likely to continue on to another course. Similarly, course providers raised the intensity of classes (three sessions of two hours each per week) as an issue in the CBEL intervention with ESOL learners, as it was a challenge for some participants to attend frequently (It should be noted, however, that ESOL provision does tend to be more intensive than other basic skills provision, so in the ESOL context, this would not be considered a particularly intensive model). It may be that more intensive learning is more effective in particular learning contexts. For example, the ASK behavioural intervention study found that most learners in an online maths and English course completed the course in less than ten days, and longer elapsed time between learning start and end date was associated with lower exams results. Similarly, the Armed Forces Basic Skills Longitudinal Study³³ found that the vast majority of RAF personnel progressed by at least one level of literacy or numeracy in less than 20 hours of provision. The report poses the question of whether the culture and context of the Armed Forces is especially supportive of learning over short and intensive periods.

Involuntary participation in learning is less effective in encouraging engagement and persistence than voluntary participation. Numerous studies have found voluntary participation to be associated with successful outcomes. A study of Skills for Life learners³⁴ studied learners who attended their classes either voluntarily or involuntarily (for example, as a result of a mandatory requirement from JobCentre Plus). Although sanctions and directions appeared to be effective in ensuring learner attendance, it was not found to lead to full engagement and participation with a training programme, and instead led to increased resistance to engage in subsequent training programmes.

Practical and social support can be effective in supporting adults to persist with learning. This can include support with childcare, transport and travel assistance, and support from other agencies for more vulnerable learner groups if needed, to remove barriers faced to engagement with learning.

Enabling learners to develop encouraging and supportive relationships with both their tutors and fellow learners can aide persistence. In community provision in particular, it is helpful if tutors can develop an informal, relaxed and supportive atmosphere, getting to know individual learners and their needs, establishing relationships of trust, and developing

³¹ Byrne, T. (2014) *Using www.writeon.ie as part of a blended learning approach with adult learners*, in Research and Practice in Adult Literacy, Winter 2014/15

³² White (2003) *Evaluation of Adult Basic Skills Pathfinder Extension Activities: An Overview*, DfES

³³ Department for Business, Innovation and Skills (2012) *Armed Forces Basic Skills Longitudinal Study: Part 2*

³⁴ O'Grady and Atkin (2006) *Choosing to learn or chosen to learn: the experience of Skills for Life learners*, Research in Post-Compulsory Education, 11:3, 277-287

friendships. Tutors can also set up learner peer support groups, which can continue working together once the course has finished.

One-to-one support from a named and trusted advisor is often viewed as a crucial part of support. In community provision, support hard to reach or vulnerable learners by a worker previously known to the learner has been found to facilitate engagement as it provides a high level of individual support for learners.

Tailoring provision to the needs and interests of learner groups

Programme design should tailor provision to the needs of target groups. Tackling serious literacy and numeracy weaknesses among adults is challenging because there is no 'one-size-fits-all' solution. Low-skilled adults are a diverse group and evidence suggests that learning is more effective when tailored to the specific needs and skills levels of each learner. Learner groups should therefore be differentiated by initial attainment in basic skills so that one class does not have to cater to a range of levels. Additionally, course content should be relevant to the lives of learners, that is, they must be able to see how basic skills can be used in their daily lives. Materials should therefore be linked to or embedded in life or workplace situations (such as helping children with their maths homework), so that they do not seem abstract.

A diverse range of settings can better meet the needs of different learner groups. Each type of setting of basic skills learning has particular facilitators for certain groups of adult learners. For example, learners in workplace settings have the ability to access learning during work time and on the work site, with support from managers and supervisors, and learning content that is relevant to job roles, which can all increase the chances of engagement, participation and successful learning outcomes. Similarly, with community provision, the particular engagement methods of 'hard-to-reach' adults, combined with a supportive teaching approach that is sensitive to the needs of individuals, can make community provision more effective than mainstream basic skills provision for certain groups, including vulnerable adults. A study of Skills for Life provision³⁵ found that the location of community provision within learners' communities and near to their homes was a significant reason for learners to attend. Older learners, and learners with lower levels of confidence, learning difficulties, disabilities or health issues believed they could access this type of provision more easily than mainstream provision. The authors concluded that it was clear that community-based learning was reaching people who would otherwise be left out.

Flexible, varied design is crucial in meeting the needs of a range of learner groups. This includes offering a range of venues in community settings (such as churches, children's centres and women's centres) as well as formal adult education facilities, and a mix of classroom-based learning and learning in other environments, such as visits to places outside of the classroom for learners to practice their skills. Learning environments outside of the classroom may be more appealing for those who struggle with classroom-based learning and have negative experiences of learning at school. In addition to flexibility of venue, courses must be scheduled at times that suit learner needs, for example, not during out of school

³⁵ Rhys Warner and Vorhaus (2008) *The Learner Study – The impact of the Skills for Life strategy on adult literacy, language and numeracy learners*, NRDC

hours or over school holidays for unemployed parents, and evening-time workplace courses may be more suitable for night shift workers.

Embedded or contextualised learning that is relevant to learners' lives enables more tailored and successful learning. It is thought that this is because learners value basic skills teachers' understanding of the demands of their vocational subject and their professional goals or other life priorities. A study of vocational learning programmes³⁶ found that even partial links between a vocational subject and basic skills improved learners' perceptions of the relevance of basic skills learning among young adults in FE College provision. A study of community provision³⁷ found that 'concealing' basic skills training within community-focused provision resulted in higher learner retention. The offer to learners was not called 'basic skills' but instead, the activities were mapped on to the basic skills curriculum, or learners' interests formed the basis of the learning subject matter, and relevant basic skills elements were studied afterwards.

Working with employers

In order to effectively engage with employers, it is important to understand their motivations for engaging in workplace learning programmes and raise their awareness of the positive impact of raising employees' basic skills on business outcomes.

Research has found that, rather than being solely and explicitly focused on improving productivity, employers' motivations for introducing workplace basic skills provision can include improving staff morale; the relationship between employer and employee; and, verbal communication for ESOL workers. This suggests that more work can be done via outreach and engagement activities to help employers understand the benefits for their business and workforce. Using case examples and testimonies from similar businesses who are successfully engaged is suggested, as is raising employer awareness of flexible provision opportunities, such as colleges providing courses on business premises, and basic skills embedded in vocational learning. The latter is considered attractive to employers who feel they are unable to free up employees during working hours.

Large companies are often the easiest to engage in workplace training provision. This is possibly because training is not as daunting for larger companies, which tend to have a culture of learning and development. The most difficult companies to engage have been found to be small companies, which usually lack the numbers of workers and infrastructure to support programmes. To get around this issue, the Upskilling Partnerships Programme in New Zealand³⁸ negotiated the creation of two cluster models involving several small companies and a single training provider. However, these clusters proved difficult to set up, administer and coordinate.

An overarching, supportive body can act as a catalyst for employers to implement workplace learning programmes. Such a body can provide advice, support and assistance with sourcing funding opportunities. Further, it can take a role in engagement of employers by

³⁶ Casey et al (2007) *'You wouldn't expect a maths teacher to teach plastering...'* *Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement*, NRDC

³⁷ Hannon (2003) *Community focused provision*

³⁸ Department of Labour, New Zealand (2010) *Upskilling Partnership Programme, Evaluation Report*, Department of Labour

making them more aware of the links between employees' basic skills learning and business outcomes and assist with sourcing training providers. The ASK behavioural interventions study found that the complexity of the skills landscape meant that employers were faced with choice overload when trying to make a decision about training, which could lead to a decision being delayed – possibly indefinitely. A guiding body could therefore assist employers in navigating the skills provision landscape.

All stakeholders within a company must have a clear understanding of and commitment to the course purpose and process, and demonstrate strong buy-in.

Actively demonstrated support of a workplace training scheme, from staff at all levels including the Chief Executive, human resources, finance, managers and workplace or trade union learning representatives shows employees that basic skills learning is seen as valuable. Further, it enables stakeholders to play a key role in recruiting learners, ensuring they attend classes, and are encouraged and supported to learn. These stakeholders can also inform tutors of workplace needs and provide them with feedback on learners' progress in transferring skills to the workplace. Additionally, there must be clear lines of communication between all stakeholders, with clear roles and responsibilities of both the employer and provider, for example clarifying who will play what role in the outreach and engagement activities.

Funding has been found to be a key factor in employers' decision-making about whether to run a basic skills programme. When funding runs out, SMEs in particular, which are less likely to have a well-resourced training programme as part of their pre-existing infrastructure, are generally unable to continue to offer provision. Analysis of the Pathfinder Extension Programme found that courses that offered incentives for employers in the form of fixed rate replacement costs performed relatively well in terms of course completion and qualifications. Fixed rate replacement costs were financial incentives (a fixed, daily rate) that employers were provided with for sending their employees on a basic skills course, designed to compensate employers for the lost time in work from their employees.

Working in partnership

Partnership working between education providers and agencies working with various client groups in the community can help address barriers to engagement with basic skills learning. As discussed, community and voluntary sector organisations may already have built relationships with potential learners in the community, who more formal education providers can only try to engage by working in partnership with these organisations. Partnership working is also crucial in ensuring adult learners receive the support they need from other agencies to remove barriers to persisting with their learning, such as in the areas of housing, debt advice, childcare or other social support. Additionally, in the US National Workplace Literacy programme study, established relationships between employer representatives and networks of experts affiliated with colleges and state agencies was found to enable staff to more easily maintain workplace learning programmes over time.

Coordination and partnership working needs to be factored into the design and implementation of programmes. Studies of community learning programmes have found that engaging effectively with hard to reach and vulnerable learners can be a very resource-intensive process, taking up a lot of workers' time in establishing relationships of trust with potential learners. This resource has to be funded and planned for, and yet currently, outcome frameworks and funding mechanisms are designed in such a way that can prohibit this type of

engagement work. For example, community organisations often do not receive funding for providing learning opportunities or engaging people in learning.

Provider and staff expertise and skills

Working with experienced providers can help to deliver programmes more effectively.

Experienced providers tend to have a greater understanding of what types of approach are likely to be most effective. Providers need to have experience in both the sector (for example, basic literacy and numeracy skills) of provision, and the setting, such as workplace, family or community learning. Experience in workplace provision, for example, ensures providers are more likely to have developed competencies in building organisational support and marketing the programme. Where providers have an understanding of the needs of the particular learner group, for example, an understanding of the business in workplace learning, or an understanding of a particular community in community provision, it has been found to lead to more successful outcomes.

Effective tutors have high level of skills and expertise. The evidence suggests that higher levels of teachers' experience and qualifications is linked to greater improvement in basic skills. Other indicators of success include teachers having additional support from regular volunteers or assistants in the classroom.

Measuring outcomes

When measuring outcomes of basic skills approaches, delivery partners should consider what outcome measures would most effectively indicate success.

In many studies, the evidence that adult literacy education produces gains in positive self-image (and similar constructs such as self-confidence) is stronger than evidence of impact on basic skills levels, qualification acquisition and self-reported skills improvements. In addition, studies of workplace learning have found that providers and employers report that the most notable outcomes for learners are wider outcomes such as increased job confidence. Furthermore, studies have found that self-confidence was seen as more important than qualifications in learners' own views, as it was enabling them to progress on to further learning or make other changes in their lives such as gaining employment. There is an argument made in the literature³⁹ that the policy focus on 'hard' outcomes (such as qualifications attainment) at the expense of wider outcomes, risks leaving disadvantaged learners behind, because they are far less able to achieve the qualifications linked to funding or performance targets.

³⁹ Mallows and Litster (2016) *How can we motivate adults to engage in literacy and numeracy learning?*

The evidence

Study 1: Bos et al (2002) *National Evaluation of Welfare-to-Work Strategies, Improving Basic Skills: The Effects of Adult Education in Welfare-to-Work Programs*, US Department of Education

- Welfare-to-work programs provided adult education to welfare recipients via mainstream Adult Basic Education and English as a Second Language classes
- Randomised control trial involving eleven mandatory welfare-to-work programs across seven US locales, with individuals assigned at random to the programme or control group
- Findings revealed no substantial impact on education outcomes – GED receipt was higher in programme group (11% vs. 4% in control group) but still low, and few learners experienced significant increases in their reading and maths skills.
- Average spend of the Welfare Department on a month of participation of one person in the programme ranged from \$54-257 in US dollars in 1999.
- Found that a threshold level of participation of approximately one year was needed to achieve gains in literacy, while increases in maths skills were associated with the first six months only.
- Higher levels of teacher experience and education appeared linked to greater improvements in learners' reading skills

Study 2: Hume et al (2018) *Improving engagement and attainment in maths and English courses: Insights from behavioural research*, Department for Education

- Trial of various behavioural interventions designed to improve participation and completion of English and maths courses
- Interventions in FE Colleges included: text messages of encouragement to learners; exercises in building grit, reinforcing positive identity and leveraging social support; and support which incorporated both text messages to learners and their supporter.
- In workplace settings, different messaging was tested in flyers to employees. In community learning, trials tested the impact of individual and 'buddy' incentives for achieving attendance thresholds on a course.
- Randomised control trial design was used for all trials, with sample of 1780 learners in FE interventions.
- Estimated cost of text message intervention in FE colleges was less than £5 per learner. Most effective message in community learning SMS trial was £10 per additional enrolment
- Text messages to learners and social support intervention in FE colleges improved attendance rates and achievement rates. The intervention that incorporated both text messages to learners and to supporters improved attainment rates by 24%. The writing exercise improved attainment by 25%. Message testing on flyers to encourage workplace learning received extremely low response rates. Cash incentives for attending classes in community provision improved attendance by 73%. SMS messages that emphasised ease of signing up to a course showed a significant increase in the number of sign ups.
- Increasing age was associated with lower predicted scores, as was longer time elapsed between learning start and end date of an online course.

Study 3: Brooks et al (2008) *Randomised controlled trial of incentives to improve attendance at adult literacy classes*, Oxford Review of Education 34:5 493-504

- Adult literacy classes run by FE colleges, LEAs and Adult and Community Learning organisations
- Learners in the experimental group could receive up to £70 as reimbursement for travel expenses plus £20 for completing a pre- and post- test, while the control group could receive a maximum of £20 each.
- Randomised control trial with 29 adult literacy classes
- There was a statistically significant reduction of 1.5 sessions attended by the intervention group compared with the control group. The control group also scored higher in reading scores than the intervention group, but this difference was not statistically significant.
- The full cost of the trial was £8135.20

Study 4: Moore et al (1998) *Addressing literacy needs at work: Implementation and Impact of Workplace Literacy Programs*, US Department of Education

- National Workplace Literacy Program (US) – federal program designed to emphasise contextualised, job-specific instruction in basic skills
- 5 sites with different types of provision e.g. ESOL learning, literacy and maths.
- Randomised control trials in each study site – the treatment group was allowed to enrol in workplace learning immediately, while the control group had to wait until the next course cycle began.
- Workplace literacy can improve literacy skills, interest in further learning, engagement in literacy tasks at home and self-rated literacy skills of learners. Also had a positive impact on teamwork skills and communication skills at work.
- A greater number of instructional hours was associated with greater program effectiveness, with 43 being the highest average number of hours.
- Other factors that emerged as key to effective learning included: partnership working between employer representatives and other agencies, reimbursement of travel costs, employer participation and support, and instructors' qualifications.

Study 5: Learning and Work Institute (2018) *Measuring the impact of community based English language provision – findings from a randomised controlled trial*, Ministry of Housing, Communities and Local Government

- Community-based English Language intervention – 11-week course of 6 hours of provision per week, designed to improve functional English proficiency, derived from the provider's existing Talk English programme
- Randomised controlled design with a sample of 527 participants, using a waiting list for the control group. Participants were recruited from communities with very low levels of functional English
- Findings revealed a strong and sizeable difference between treatment and control group in terms of both change in proficiency and overall proficiency at the end of the trial across all measures of speaking, listening, reading and writing.
- Also found significant impact of intervention on social integration measures, including confidence interacting with services and social interactions.
- Higher educational attainment was a significant predictor of improvement in proficiency

Study 6: Murphy et al (2017) *Evaluating Digital Learning for Adult Basic Literacy and Numeracy*, SRI Education

- 14 different Adult Basic Education programmes that used 5 different ICT products to facilitate the learning of basic skills (US)
- A treatment group of students who used an ICT product was compared with a matched control group of students who did not. National standardised assessments were administered in each programme site.
- Results showed positive impacts of ICT use for some sites and outcome measures but negative impacts for others.
- Students and instructors reported positive experiences of using the ICT products and reported positive effects such as feeling more confident to use online resources for self-study at home.
- However, one in five students did not enjoy using ICT and preferred learning directly with instructors. Authors suggest that particularly for those with the lowest skills, blended and hybrid models of learning with instructors delivering 50% or more of instruction will perhaps be most effective.

Study 7: White (2003) *Evaluation of Adult Basic Skills Pathfinder Extension Activities: An Overview*, DfES

- The DfES Pathfinder Extension Programme comprised provision which embodied the main principles of the Skills for Life strategy.
- The innovations promoted by the Extension were of two main kinds. One was to make the learning more concentrated, and included residential courses, intensive courses, and highly structured and prescriptive (HSP) courses. The second innovation was to offer financial incentives, either incentives for individual learners of up to £250, or fixed rate replacement costs offered to employers to compensate them for lost time from employees.
- Outcomes for 826 participants of the Extension Programmes were compared with those of 517 learners on conventional basic skills courses, which formed a matched comparison group.
- Found that Pathfinder Extension courses produced positive impacts on short-term outcomes such as the likelihood of completing within the year and enrolling on more than one new course. However, the overall positive effect of Extensions on course completion is not observed for residential or intensive/HSP courses. A strong negative impact on starting a new course, planning a new course and interest in future courses is estimated for intensive/HSP course participants.
- Courses that offered incentives for either employers or learners performed relatively well in terms of course completion and qualifications.
- The study emphasises the importance of support to access learning, partnership working, financial incentives, and IAG on progression options.

Study 8: Reder (2014) *The impact of ABS Program Participation on Long-Term Literacy Growth*, US Department of Education

- Multiple Adult Basic Skills programs in Portland, Oregon, US
- Analysis of data from the Longitudinal Study of Adult Learning (LSAL) to examine long-term impacts of ABS program participation
- LSAL randomly sampled 1000 high school dropouts and followed them from 1998 to 2007. The study followed both participants and nonparticipants in adult literacy programs, assessing their literacy skills and skills use over time. The analysis used fixed effects panel regression analysis.

- Found no relationship between proficiency change and participation in basic skills programs, as found small proficiency gains among both program participants and equivalent gains among comparable non-participants.
- Did find a strong positive relationship between program participation and changes in literacy and numeracy practice measures, e.g. reading books and using maths at home. Suggests that changes in literacy and numeracy practices would be a more effective way to assess short-term program impacts.

Study 9: Brooks et al (2001) *Progress in Adult Literacy – Do Learners Learn?* Basic Skills Agency

- Mainstream (provided by a FE college or LEA), dedicated basic skills provision in England and Wales
- Mixed methods study over two years using pre-testing and post-testing of 1224 learners for reading and 937 learners for writing skills. Qualitative interviews with basic skills coordinators, and a quantitative questionnaire for 177 tutors
- Small but significant increase in quality of handwriting and length of script. Gain in reading was 'probably' educationally significant.
- For reading, attendance at 51-60 hours of tuition had the strongest association with progress.
- Tutors having assistance in the classroom and qualified tutor status had a positive relationship with students' gains

Study 10: Casey et al (2007) *'You wouldn't expect a maths teacher to teach plastering...'* Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement, NRDC

- 79 vocational learning programmes at levels 1 or 2 in one of 5 areas of learning: health and social care, hair and beauty therapy, construction, business and engineering
- Courses were ranked on a scale from non-embedded to fully embedded, based on features that emerged as indicators of embeddedness, such as teamwork between basic skills and vocational teachers. This scale enabled comparison of outcomes from more and less-embedded courses
- A mixed-methods approach was used, including a questionnaire of learners' attitudes, interviews, focus groups and observations.
- Vocational courses in which basic skills was embedded were linked to more positive outcomes than courses for which basic skills content was separate. Where basic skills was embedded: retention was higher (77% compared to 62% on non-embedded courses); success rates in the vocational subject were higher (71% vs. 61%); learners were more likely to achieve basic skills qualifications (93% of learners on fully embedded literacy or ESOL courses vs. 50% on non-embedded courses); and learners believed they were better prepared for work.
- The greater the degree of embedding, the greater the effect, but even low levels of embedding can be effective in Level 2 courses

Study 11: Brooks and Pilling (2013) *The impact of Skills for Life on adult literacy, language and numeracy learners, ii: analysis of new quantitative data*, NRDC

- Skills for Life provision, UK, 2004-2006

- Quantitative analysis of pre- and post-testing and questionnaire data gathered from 1649 adult literacy, ESOL and numeracy learners to estimate whether their skills and/or attitudes to learning had changed.
- The basic skills of learners, overall attitudes to literacy and their self-confidence, improved, after 3-6 months of instruction (typically one two-hour session per week).
- Average numeracy skills scores moved from the upper end of Entry level 3 pre-test to Level 1 post-test
- Gains in reading and writing also represented about one third of a level.
- ESOL learners aged 16-19 made more progress in reading than other age groups.

Study 12: Coben (2007) *Effective Teaching and Learning: Numeracy*, NRDC

- Adult numeracy provision in England, including: Return to Employment, Foundation ICT, family numeracy, workplace-based group, JobCentre Plus provision in FE Colleges, community groups, a LEA and a private training provider
- Skills assessments, attitude surveys, observations and interviews involving 412 learners and 33 teachers in 47 classes.
- Numeracy learners made statistically significant progress between the two assessments administered (an average gain of 9% in test scores) but with a wide range of average gains between different classes
- Learners' attitudes towards learning numeracy were more positive at the end of the course, with improved self-reported confidence and self-esteem.
- The average attendance by learners between assessments was 39 hours
- Most learners reported 'getting a qualification' and 'getting a better job' as the main reasons for doing a numeracy course. Only one-fifth attended because they perceived that they lacked skills in their everyday lives, and most said they could get by with the maths they already knew

Study 13: Department of Labour, New Zealand (2010) *Upskilling Partnership Programme, Evaluation Report*, Department of Labour

- The Upskilling Partnership Programme was developed by the Department of Labour to increase the engagement of employers in workplace literacy programmes. The Department set up a dedicated office to manage day-to-day support for the partner agencies involved, to support and encourage employers to implement workplace programmes independently.
- A multi-method evaluation used pre-and post- test assessments of 280 learners' reading and writing skills and interviews with 343 learners. Quantitative and qualitative information was also gathered from supervisors and managers.
- There was a positive and significant improvement in participants' average reading and writing scores. Many self-reported an improvement in their LLN skills, improvements in self-confidence and belief in their ability to do their jobs.
- Providers reported the most notable outcomes for participants were increases in personal and job confidence, improved communications with other workers and a greater interest in training
- The study highlighted the importance of the overseeing body of the Upskilling Partnership Office which acted as a catalyst for employers. The best recruitment results were achieved when potential participants were proactively shouldered to attend by a manager or supervisor.

- Participants received one or two hours of teaching per week over 4-12 months. Courses where learners attended an average of 12-20 hours were as effective at improving average reading and writing scores as those where learners attended an average of 40-60 hours.
- Course content was contextualised to the participants' work demands and personal interests
- Providers and employers agreed that important aspects of implementation included: tutors with a high level of LLN teaching experience, who could understand and be adaptable to business needs, course publicity, course timing that fits in with company's schedule, support from supervisors, and government funding.
- Those who spoke English as a second language were much more likely to report their skills had improved
- Large companies proved the easiest to engage

Study 14: Swain et al (2013) *Learning literacy together: the impact of Family Literacy on parents, children, families and schools*, NRDC

- 74 Family Literacy courses provided across 42 Local Authorities in England were included in the evaluation, of which 46 were short courses (30-49 hours) and 28 were standard courses (60-72 hours)
- 583 parents were assessed in the reading and writing skills via a pre- and post- course assessment. The evaluation also used observations, and semi-structured questionnaire with LA managers, tutors, children and parents.
- Parents made only a non-significant amount of progress in reading, and on average, a small but significant gain in writing skills. 56% of parents on short courses and 71% of parents on standard courses achieved a qualification. There were statistically significant gains in parents' confidence, and many parents had completed a further course or intended to continue learning after completing the course.
- Estimated costs per participant-learning hour was £7.39 for the short courses and £6.84 for the standard ones.
- Family learning appeared to work best when it was embedded as part of a wider learning programme
- The prime motivation for parents for taking part in learning was to support their children's learning skills, rather than develop their own.
- It was recommended that programme design ensured provision was flexible, supportive, and tailored to learners' needs.

Study 15: Tett et al (2006) *Evaluation of the Scottish Adult Literacy and Numeracy (ALN) Strategy*, Scottish Executive

- Adult literacy and numeracy provision, Scotland, based in over 100 different institutions with a variety of programme arrangements and types of provider
- Mixed methods evaluation to assess the impact of provision, using pre- and post-course interviews of 339 learners and interviews with 78 tutors.
- The key impact documented was increased self-confidence, which was seen as more important than qualifications in learners' own perceptions
- Key motivations included improvement of basic skills, and general self-improvement, with a smaller proportion of learners reported employment-related motivations.

- Key triggers were personal motivation, the encouragement of family or friends, and professional advice.
- Barriers included concerns about meeting new people, the reaction of friends, ability to successfully complete a course, and that the course might be like school.
- Enablers included good publicity that challenged the negative stigma of adult basic skills learning and making the process of joining the course easy and supportive.
- The small percentage of learners who had left their programme because they were unhappy with the content or methods were most likely to be part of mixed groups with a broad spread of ability.

Study 16: Mellar et al (2007) *Effective Teaching and Learning: Using ICT*, NRDC

- Adult basic skills provision that used seven different scenarios of ICT to facilitate learning, in teaching sessions of 40 mins over two terms.
- 150 students took part in the evaluation, and 80 completed both pre- and post-tests after 40 hours of class time. Each classroom was observed four times
- Learners improved in almost all cases in ICT skills. Statistically significant improvements in mean reading level were found for only two of the seven products.
- Most users found the use of ICT motivating, with mobile technologies such as tablets and mobile phones found to be particularly motivating, and enabled greater flexibility in teaching
- Older learners made the least progress
- There were positive correlations for ICT skills and confidence. Those with lower initial ICT confidence scores were likely to attend less frequently than those with higher scores, and were more likely to eventually drop out

Study 17: Condelli, L (2003) *What works study for adult ESL literacy students*, US Department of Education

- 38 ESOL classes from 13 programmes in 7 US states
- 495 students were assessed at entry and approximately three and nine months after enrolment, to measure students' English language and literacy development using tests. Students were also interviewed about their literacy practices
- Found that the shorter the class's weekly scheduled meeting hours, the faster the rate of students' learning in basic reading skills. Students in classes with more scheduled instructional hours per week attended at a lower rate and intensity
- Reading skills grew faster among younger students, those with more years of formal education, and those with higher attendance. Speaking skills grew faster among younger students, those who attended at a higher rate, and those with higher initial basic reading skills.
- Older students who were mandated to attend attended at a lower rate and intensity than younger mandated students

Study 18: Brooks et al (2013) *Study of Effective Practice in the Teaching of Reading to Adult Learners*, NRDC

- Mainstream adult literacy provision, 59 classes provided by FE Colleges, LEAs, charities, training providers and one prison

- Correlational study that assessed 454 learners' attainment and attitudes to reading three times
- 163 out of 265 learners achieved an externally accredited qualification at the end of their course, and 171 out of 265 went on to further study. However, statistical analysis of the reading assessment data showed no significant differences between the mid- and post assessments in either year. Statistical tests of the attitudes questionnaire data showed a small but significant increase in self-confidence but not in frequency of literacy-related habits

Study 19: Wolf, A et al (2009) *Enhancing 'Skills for Life: adult basic skills and workplace learning: full research report, ESRC*

- Workplace learning courses in literacy or IT (UK)
- Mixed method study involving repeated collection of data from skills assessments of learners and learning disposition surveys. Also involved interviews with managers, tutors and other partners.
- Although results showed a positive trend over time, analysis offered no clear evidence that the workplace basic skills initiative led to significant improvements in basic skills. The major actual outcome identified by managers was 'increased confidence', in line with participants' responses.
- Almost no employers in the study needed or urgently sought literacy improvements. On the contrary, employers were most interested in improving staff morale, and offering general development. For ESOL workers, improved verbal communication was also seen as desirable. Direct improvements in productivity were not expected
- Key to the success of the programme was funding
- A typical course length was 30 hours
- Learners who had enrolled involuntarily were less likely to report reading more by the final interview
- Among ESOL learners, those already qualified at levels 1 or 2 were more likely to improve their reading scores than those with no qualifications beforehand.

Study 20: Rhys Warner and Vorhaus (2008) *The Learner Study – The impact of the Skills for Life strategy on adult literacy, language and numeracy learners, NRDC*

- Skills for Life provision
- Mixed method study involving two strands. The first involved analysis of the Learning and Skills Council's Individualised Learner Record to look at trends in participation and achievement between 2000/01 and 2004/05, while the second gathered new data from two samples of learners using literacy and numeracy tests administered before and after courses, attitude questionnaires, and learner background profiles. A qualitative strand included six case studies in six learning sites, drawing on data from in-depth interviews, observations and focus groups.
- The skills levels of all groups of learners improved on average, with the exception of writing levels of literacy learners, with an average of around one third of a level of progress made, e.g. from the upper end of Entry Level 3 to just over the threshold into Level 1.
- Learners reported increased personal skills, confidence and take up of other learning
- Between the years 2001-2005 there were considerable increases in overall figures for enrolments, completions and achievements.

- Although many managers and coordinators felt that participation and achievement targets helped to ensure quality and quantity, some found them overwhelming and confusing, and felt that they posed barriers to working with 'hard to reach' learners who presented a funding risk
- Learners reported a wide range of motivations, including work-centred motivations and intrinsic motivations such as overcoming embarrassment and regaining confidence.
- Workplace learning was most successful where the company involved was committed to the provision at all levels of management
- For learners in community based provision, it was important that they could access provision easily, and that it was located near their homes.
- Positive experiences of learning were reported particularly when tutors were able to respond to individual needs, which required flexibility from providers
- Among ESOL learners, the age group 16-19 made more progress than older learners

Study 21: Department for Business, Innovation and Skills (2012) *Armed Forces Basic Skills Longitudinal Study: Part 2*

- Literacy and numeracy provision for Armed Forces personnel in the Army, Royal Navy and the Royal Air Force. Delivered through a Phase 1 training unit, then through Apprenticeship Programmes and then in the Field Army through the Army Education Centre network.
- Longitudinal, mixed methods study, tracking individuals over 3 years of service. The qualitative strand followed the progress of 20 Service personnel from each of the three Services, with evidence from these groups supplemented by testimony from the recruits' line managers, trainers, and senior officers, as well as education staff and literacy and numeracy practitioners. The quantitative study followed a sample of around 1600 Army recruits during their first two and a half years of training or service, collecting data on their literacy and numeracy profiles, including their needs, learning and progress.
- The literacy and numeracy of all the sampled recruits improved and there were positive changes in how these recruits reported their skills and difficulties, with overt encouragement and support for individual improvement, progression and 'getting on'.
- all three Services are strongly committed to helping personnel with basic skills needs, in order to support more effective operational capability and workforce development. The culture and organisational context of the Armed Forces greatly influences the design, management and delivery of each Service's literacy and numeracy provision
- The vast majority of RAF personnel progressed by at least one level of literacy or numeracy in less than 20 hours of provision. The report notes that all Services are accustomed to operating in an environment in which short and intensive training is the norm and suggests that the culture and context of the Armed Forces is especially supportive of learning over short and intensive periods.

Study 22: Beder (1999) *The outcomes and impacts of adult literacy education in the United States*, The National Centre for the Study of Adult Learning and Literacy

- US adult basic skills provision, including national, state-level, workplace, welfare and family literacy programmes
- Qualitative analysis of the 23 'most credible' adult basic skills evaluations, plus a secondary analysis of data from the National Adult Literacy Survey of 1992

- All of the 10 studies that measured continued education found that participation in adult literacy had a positive impact on further education
- Learners perceived gains in reading, writing and maths skills
- Five studies tested basic skills gains. One study found small gains after an average of 84 hours of instruction, and another found small gains for ESOL students after 120 hours, although substantial methodological problems were associated with these results
- Four studies found impacts for GED acquisition. Of all the evidence presented in this study, the evidence that adult literacy education produces gains in positive self-image is the strongest.

Study 23: Benseman, J (2010) ‘Planning and teaching effective workplace literacy, language and numeracy programmes: what does research tell us?’ Journal of Adult Learning Aotaroa New Zealand 38(2), 19-28

- The Upskilling Partnerships Programme – see **Study 13**
- Meta analysis of the Department of Labour’s 2010 study (**Study 13**) to identify which factors influence courses’ effectiveness
- Provision that had the most successful impact on outcomes were frequently associated with the following features: all key stakeholders within the employer company had a clear understanding of the course purpose and demonstrated high levels of support; tutors were experienced in both LLN teaching and workplace programmes; content was explained clearly to participants; courses were run in work time, and teaching content was closely related to companies’ priorities and participants’ specific learning needs.

Study 24: National Audit Office (2008) Skills for Life: Progress in Improving Adult Literacy and Numeracy, NAO

- Skills for Life programme
- Secondary data analysis of national administrative data for publicly-funded provision, case studies, literature review, and stakeholder consultation.
- The study found that the Skills for Life programme had engaged 5.7 million learners on 12 million courses with 7.6 million achievements.
- ESOL courses were typically more expensive (£1,030) than literacy courses (£510) or numeracy courses (£460); and Entry level courses were typically more expensive (£960) than Level 1 (£570) and Level 2 courses (£400). The Skills for Life programme had engaged 5.7 million learners on 12 million courses with 7.6 million achievements, at an overall cost of £5 billion. This represented an average cost of £660 per achievement.
- The study found evidence that embedding basic skills provision into other learning activities and making basic skills content relevant and linked to the lives of learners was most effective. It also made recommendations for how to best engage both learners and employers in workplace learning schemes.

Study 25: Torgerson et al (2004) ‘Adult Literacy and Numeracy Interventions and Outcomes: a review of controlled trials’, NRDC

- Various adult literacy and numeracy programmes
- A systematic, expert review of studies to provide a synopsis of findings on effective practice in teaching adult literacy and numeracy (focus on pedagogy)

- The review of RCTs found just enough evidence (all of it from the US) to demonstrate that receiving adult literacy and numeracy tuition does produce more progress than not receiving it
- Revealed that since 1980 only six studies out of a total of 36 trials showed a statistically significant positive outcome from the intervention
- Factors that appeared to be most strongly linked to effective programmes included: enabling learners to gain credit and accreditation for their learning and move into further study; voluntary participation, consultation between and commitment of all stakeholders in workplace learning.
- Found that the average learner stays in provision for fewer than 70 hours in a year

Study 26: Hamilton and Wilson (2005) *New ways of engaging new learners: lessons from round one of the practitioner-led research initiative, NRDC*

- CLiCK research project tests the impact of a partnership model designed to encourage vulnerable and 'hard to reach' individuals into learning
- The study aimed to measure the increase in personal confidence and aspiration of individuals as a result of learning, and monitor the learning journey, with a specific focus on participation in basic skills programmes.
- Qualitative data was collected using a 'Catching Confidence' research tool, and observations were made by staff of learner behaviour.
- The partnership model was found to be effective in engaging hard to reach groups in learning
- Effective approaches were found to include partnership working with community and voluntary sector groups; support by a known worker; and the use of already-established working relationships.

Study 27: National Audit Office (2004) *Skills for Life: improving adult literacy and numeracy, NAO*

- Skills for Life provision from a range of providers and locations, including colleges, private sector providers, learndirect centres and community providers.
- The initial target of improving the literacy or numeracy of 750,000 people by 2004 was found to have been achieved. Focus groups found evidence that indicated increased confidence and self-esteem among learners, who felt more job-ready. Many expressed an interest in further study and more positive views of education
- Methodology involved stakeholder consultation, expert panel, case studies, analysis of existing data, literature review, focus groups and depth interviews with learners.
- Average costs for qualifications achieved in 2002-2003 through Learning and Skills Council funded provision in colleges included: £1301 for adult literacy and numeracy qualifications (with a range from £609 for level 2 literacy to £3469 for entry level literacy); and £1119 for Key Skills of communication and application of number, (ranging from £998 for level 2 communication to £1518 for level 2 application of number). It was found to be more difficult to work out the specific costs of literacy and numeracy provision where those skills were embedded in the work of vocational and other learning programmes.
- Voluntary and community organisations were found to be essential partners as they are best placed to encourage into learning those who are very hard to reach

- Recommends using the enthusiasm and knowledge of successful learners in the promotion and recruitment of new learners.
- The offer of flexible learning opportunities and financial incentives can encourage employers to engage in workplace learning programmes
- By acknowledging gains already made, flexible and innovative assessment can support learner persistence when adults drop out of formal programmes
- Programmes should adapt to the personal circumstances and needs of individual learners.
- Embedding basic skills learning in vocational or family literacy learning can make it seem more relevant to the daily lives of hard to reach learners

Study 28: O’Grady and Atkin (2006) *Choosing to learn or chosen to learn: the experience of Skills for Life learners, Research in Post-Compulsory Education, 11:3, 277-287*

- The study analysed learning in three different types of approach: FE college programmes containing LLN provision; Basic Employability Training (BET) programme run by JobCentre Plus, and prison-based LLN classes
- Learners could be ‘directed’ by JobCentre Plus staff to attend the BET programme, and if they did not attend, could face benefit sanctions. Those who attended received a training allowance and partial reimbursement of travel costs. Those who achieved a Skills for Life qualification also received a financial reward of £100. Learners on the FE College courses did not receive any financial incentive for attending. The classes offered by the prison paid learners who attended 75p per session.
- Life history interviews were carried out with 44 learners across all three programme types. Interviews were also carried out with Skills for Life practitioners.
- Found that directions and sanctions for involuntary learners did not ensure active participation and engagement in learning and could lead to increased resistance to engage in subsequent training.
- Voluntary learners had clear goals and targets about the qualifications they aimed to achieve sat in a broader plan for the future. Involuntary learners on the other hand, referred to extrinsic motivations, such as the threat of sanctions if they did not attend class. They were more likely to be passive participants in the training programme and unable to describe why they were attending.

Study 29: Barton et al (2006) *Relating adults’ lives and learning: participation and engagement in different settings*

- A range of adult literacy and numeracy learning settings, ranging from college-based providers to informal learning by participation in an organisation’s activities, such as a Structured Day Programme at a drug and alcohol support centre. The research aimed to explore the facilitators of engagement and participation in adult community basic skills learning.
- Qualitative depth interviews with staff and service users, involving over 50 formally-recorded interviews.
- Findings revealed that learners’ social circumstances meant they experienced unpredictable change in their lives, with shifting priorities that meant they had to dip in and out of learning. Provision therefore needs to be flexible and adaptable to learners’ changing priorities

- Tutors in community settings need the time and resource to understand the individual needs of learners and how to tailor the learning content to their interests and needs
- Staff focused on developing a supportive, informal, relaxed atmosphere for learning.
- Learners experienced a range of barriers to engaging in learning, including negative experiences of education.

Study 30: Hannon (2003) *Community focused provision*

- Community-funded provision of adult literacy, numeracy and ESOL skills
- A six-month exploratory study involving a literature review, stakeholder consultation and case studies of 11 providers
- Findings showed that community-focused provision is an appropriate way of meeting the needs of adult basic skills learners
- Key factors associated with successful community basic skills provision were holistic approaches to learning, whereby learning was aligned with learners' lives and interests; sensitivity to any prior negative experiences of education; embedded learning; using learners' own definitions of achievement and progression.
- Outreach and engagement of learners involved time and resource-intensive 'development work', which needs to be part of someone's job, and has implications for funding.

Study 31: Byrne, T. (2014) *Using www.writeon.ie as part of a blended learning approach with adult learners*, in *Research and Practice in Adult Literacy*, Winter 2014/15

- www.writeon.ie is a website of the National Adult Literacy Agency (NALA) that is used as part of a blended learning offer of literacy and numeracy tuition in Ireland.
- Qualitative case study approach, using semi-structured in-depth interviews with learners and tutors in 5 case studies
- Findings included that using the website enabled learners in case studies to work independently, catch up on work missed when they had not attended a class, and learners were familiar with the immediacy of technology and liked the immediate response and feedback they got from completing tasks online
- Tutors reported that young people who resisted learning with the more traditional pen and paper format because it reminded them of negative school experiences engaged better with online learning
- A key benefit of the website is that it diagnosed individual learning needs and quickly developed individualised learning plans. This removed the issue that tutors face when teaching one course to a room of learners with disparate needs and was thought to give learners greater levels of motivation.

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