



Government
Office for Science

 Foresight

Factors and motivations affecting attitudes towards and propensity to learn through the life course

Future of Skills & Lifelong Learning

Evidence Review

Foresight, Government Office for Science

Factors and motivations affecting attitudes towards and propensity to learn through the life course

Alan Tuckett & John Field

August 2016

This review has been commissioned as part of the UK government's Foresight Future of Skills and Lifelong Learning project. The views expressed do not represent policy of any government or organisation.

Contents

Executive Summary	4
Argument.....	5
Policy discussion	7
Family and inter-generational learning.....	7
Schools (colleges and universities) as hubs for community engagement.....	8
Learning cities/ inter-agency co-operation	8
Advice and guidance at key life transitions	8
Targeted entitlements	9
Outreach and taster provision in areas of low participation, accompanied by promotional campaigns ..	9
Appendix.....	10
1. Inter-generational learning and its impact (Comment 2,3,5)	10
2. Learner identity (Comment 3,6,9,10).....	10
3. Life experiences and learning	11
4. Older learners	11
5. Technology	12
6. Supply and demand	12
7. Entitlements.....	12
8. Impact of motivational campaigns, combined with local outreach initiatives	12
References.....	14

Executive Summary

'The best single predictor of later participation in education is earlier participation (Tuijnman 1991).' The combination of an ageing demography, technological change, and increased international competition at work, alongside evidence of the wider benefits to health and well-being bestowed by learning, have led to an increased interest in promoting learning throughout adult life, and an increased interest in the factors and motivations affecting attitudes to learning and propensity to learn. Adult participants in learning, whether formal or informal, are disproportionately young, middle-class, and well-qualified, in employment, living in communities where learning is valued, and with parents who experienced extended education. This paper, finds that the propensity to participate is strongly influenced by family experience of and attitudes towards education (parental involvement in school has four times the impact of social class); by earlier education experience, and by expectations at work. Access to technology has only modest impact. Home, school, work and community interact in complex ways to foster or inhibit participation. Significant life-stage transitions (including childbirth, changing job, redundancy, children leaving home, bereavement, retirement) also influence participation, and can provide the motivation to learn – though participation decreases among older adults. The motivation to participate is affected by the extent of individual self-efficacy, supportive peer groups, access to effective advice and guidance, and easily accessible and affordable provision. Supply stimulates demand. Policy options for maximising participation include family and inter-generational learning; re-developing schools and colleges as community learning hubs; supporting learning cities; strengthening advice and guidance; targeting entitlements on under-represented groups, and securing sufficient supply.

Argument

Whilst ‘learning of some sort is ubiquitous throughout people’s lives’ (Biesta 2011), adult participation in structured learning, whether formal or informal, vocational or academic, certificated or uncertificated, engages only a proportion. Patterns of adult participation have been extensively researched over the last two decades and demonstrate sharp differences between adults who report learning beyond initial education of any structured sort, and those who do not. Adult participants are disproportionately young, middle-class, and well-qualified, in employment, living in communities where learning is valued, and with parents who experienced extended education (Boudard 2003, Eurostat 2007, Snape 2007, Sargant 1991, 1997, 2002; Gorard 1998, 2007, White 2012, OECD 2013). For example, the 2010 National Adult Learning Survey reported a 63% gap between adults with level 5 qualifications and those with none (BIS 2012). Research shows that adults currently learning plan to learn in the future, and that those who say they have done no learning since school overwhelmingly report no intention to take up learning in the future (White, 2012, Aldridge, 2010, Sargant, 2002).

Table 1: Future Intentions to Learn by Current/Recent Engagement in Learning

	Likely to take up learning (%)	Unlikely to take up learning (%)
Current learners	83	17
Current and recent learners	77	23
Not learning in the last 3 years	23	77
No learning since school	17.5	82.5

Source: NIACE, unpublished data, 2015 (sample size 6217; weighted sample 5952). UK adults 17 and over.

There is broad consensus, however, that the factors with the strongest impact on shaping a propensity to participate in formal or informal learning in adult life are in the experience and expectations of family, (what Rubenson calls ‘ the long arm of the family’), the extent of initial education, expectations and opportunities experienced in the workplace and, age and life stage. There is consensus too, that these have been consistent over time (Rubenson, 2007, Gorard 2007, Sargant 1997, Macleod 2007). Parental involvement in school was found to be more than four times as important as social class in influencing performance of young people at 16 (Tuijnmann, 1991 Feinstein 1997, 2004, Nunn 2004 See appendix 1).

Nevertheless, for adults, social class is influential in relation to participation and social mobility – longitudinal studies show that in the UK the majority of participants are middle class, motivated to maintain social standing and to reinforce relative advantage. However, Raffe found that significant numbers of participants from the poorest groups who persevered in formal learning did experience social mobility (Raffe 1979, Blossfeld 2014).

In their comparative study of labour market focused adult learning in European countries Blossfeld et al found that overall women benefit more than men from participation in adult

learning, but they also found that despite sharp differences in overall levels of participation and in the balance of responsibility taken by state, market, or individuals in different states, work related adult learning did not ameliorate earlier educational disadvantage (Blossfeld 2014).

Adults' learning identity is shaped early, both by family expectations and initial education, and can be difficult to shift, (Gorard 1998, 2002, appendix 2). Nevertheless, age and life stage are also significant: participation in formal learning decreases markedly in later life (Biesta 2011, Bienart 1998, Gegenfurtner, 2012, Sargant 2002 appendix 3 and 4).

Interestingly, despite major changes in access to the internet and other new technologies, the extent to which access to new technologies affects propensity to learn has remained consistent over time, whilst the uses to which the technology are put, and the processes used have become more complex (White 2011, 2012 appendix 5).

However, the interaction of factors affecting participation, deriving from home, school, work and community, are complex and multi-layered, with each constraining or enhancing the degree of individual agency (Bronfenbrenner 1979, 1986, OECD 2007 appendix 2).

Individuals' agency (the ability to give direction to one's life) is affected by the extent of their self-efficacy and self-esteem, resilience, and the value they attach to the future: each affects their receptiveness to new learning. Positive learning experiences engender a desire for more learning, building identity, social and human capitals. Negative experiences of education have the reverse effect (Feinstein 2006, Schuller 2004, Field 2005, 2009 appendix 2).

Peer groups also matter. Whilst an individual's own education can affect self-confidence, self-efficacy, resilience, and the value placed on future actions, the impact is increased significantly where that experience is common to peers and surrounding groups – including spouses and partners (Feinstein 2006, OECD 2007). The TUC's successful unionlearn initiative, encourages workers to take up learning through peer driven advice and guidance, and shows clearly that peers can have a positive effect in securing the confidence and trust necessary to participate. But peers can be powerful inhibitors too, as Field noted in relation to adult non-participants with successful school experiences in Northern Ireland (Field 1999). High levels of inequality generate low levels of general trust; whilst the participation levels in adult learning in the Nordic countries derive from and reinforce high levels of trust (Green 2004, Rubenson, 2006, Tuijnman 2003). The sharp differences in participation patterns of different ethnic and linguistic minorities (high participation among younger Chinese adults and very low levels by Bangladeshi and Pakistani women, for example) reflect cultural attitudes, experience and expectations (Aldridge 2008).

Given these parameters, transitions through the life-course (anticipated or unanticipated) as adults take on new roles and responsibilities and relinquish older ones, can trigger reflection on experience and possibility, and positive motivations to learn (Boud 1985, Schuller 2009). Initial labour market entry (and to what kind of job); keeping a job and seeking promotion at work; moving to another region or country; seeking to change job or career; giving birth, and children first going to school; voluntary and civic engagement and responsibilities; children leaving home; divorce; sudden unemployment; developing an illness; retirement; and bereavement - all stimulate demand for learning among significant numbers of people, as people let go of an

earlier persona to take on new challenges (Merriam, 2005; Bridges 1980, Schlossberg 1995 appendix 4). Motivation (which Wlodkowski describes as binding emotion to action) to take up learning is of key importance – and varies according to age and gender: Younger adults learn mostly for employment-related reasons, while older adults and women learn more for personal satisfaction, self-development, leisure purposes and family or role transitions (Wlodkowski 2008). The evidence also suggests that there is some correlation between socio-economic circumstances and learning choice with disadvantaged groups tending to be found on lower level, non-advanced courses, and public and private investment focused disproportionately on already confident learners (McGivney 1990).

Whether adults act on the triggers afforded by life transitions depends not only on their prior experience and impetus to learn, but also on information, guidance and advice upon the existence of accessible and affordable opportunities (UDACE 1986).

In a seminal review of research into common barriers to participation, Cross identified not only the dispositional issues highlighted above, but also situational (time and cost) and institutional (gatekeepers, structures, processes in educational and training bodies) barriers (Cross, 1981). McGivney's work confirmed these as general inhibitions but added a range specific to particular to non-participant groups – among them childcare facilities for young mothers, accessible buildings and reasonable adjustments for disabled adults, language barriers for many ESOL speakers, and transport facilities for rural communities (McGivney, 1990).

There is nothing inevitable, however, about a disposition not to participate. Motivational campaigns using mass media, backed by local advice and opportunity can have striking results, as illustrated by the BBC Second Chance campaign, and the Skills for Life campaign (Tuckett, 1997, Meadows 2007). Local outreach activity makes a difference: as in other markets supply can stimulate demand (see appendix 6).

Policy discussion

Initiatives to stimulate the will to participate need to balance targeted interventions limited to primary beneficiaries which limit costs but may involve stigmatisation, with broader and more inclusive initiatives, which may be more effective at reaching target groups. If the key aim is to secure more equitable distribution of the benefits of learning, the balance between universal and targeted provision needs continual review.

Family and inter-generational learning

As argued above, parental attitudes to learning have a powerful influence on future attitudes to learning, and on propensity to participate (Gorard 2007, Rubenson, 2007). The evaluation of the 1990s government funded family literacy programmes showed gains in skills among parents and children alike were sustained over time (Appendix 1, Brooks 1997). The OECD PIAAC studies argue for giving priority to public investment in early years. For maximum impact, policy makers should consider the benefit from investing in family learning (Sticht calls this a 'double dealing dollar: since money spent on family learning secures mutually reinforcing skills gain for adults and children alike) , where inter-generational benefits reinforce the gains from public investment in early years and parental involvement in the education of their children sustains over time.

There has been modest investment in education across multiple generations, at least in industrial countries, but the role of grandparents and other elders in mutual learning with young people and children is worth further exploration.

Schools (colleges and universities) as hubs for community engagement

Building on parental engagement in the early education of children, Henry Morris's village school initiatives in Cambridgeshire in the 1930s recognised that beyond their primary purposes schools are major educational resources for the wider education of communities and were widely adopted with adaptations elsewhere in the UK until the formal legal separation of school and community education premises (Kelly 1970). The subsequent legislative separation of schooling and further education weakened the role of schools as stimulators of wide cultural and learning engagement. Legislative changes also led to a weakening of universities' wider community engagement, and policy priorities have weakened outreach in colleges. The 1982 Advisory Council for Adult Continuing Education report called for local development councils for inter-agency co-operation to maximise community engagement in learning, and within DfES and BIS some similar initiative is worth considering to secure maximum impact with limited resources (ACACE 1982).

Learning cities/ inter-agency co-operation

However, the widespread international interest in learning cities is built on broadening this interest in securing cross- institutional co-operation into a broader cross-sectoral concern – recognising that learning has a key role in addressing a range of issues like environmental sustainability, health and well-being, and skills development, that affect a range of different sectors - and engaging business, third sector, cultural institutions and other public agencies in addressing them together. Successful learning cities like Malmö or Shanghai have recognised the merits in sub-regional coalitions to stimulate learning across the life-span, and Glasgow and Bristol offer effective examples of the value of a learning cities approach to motivation and engagement more locally. The academic network PASCAL shares research developments in learning cities and UNESCO's Lifelong Learning institute has taken a lead role in co-ordinating co-operation between them. There was a brief period of government interest in learning cities in England following the European Year of Lifelong Learning in 1996. Their role in stimulating a learning culture is more asserted than thoroughly tested by research but merit review (Larsen 1999, Longworth 2006).

Advice and guidance at key life transitions

A stream of advisory reports from the 1980s have argued the merits of advice and guidance for adults, not only to complement careers advice for young people, but also to help adults to clarify learning goals, discover appropriate provision and to negotiate the labyrinthine routes to participation. They have been followed by a range of short-term, face-to-face and on-line initiatives, all of which have revealed demand and most of which have been challenged in balancing the tension between universal and targeted provision. Given the evidence of openness to learning at key life transitions and the challenge of supporting adults to sustain extended working lives, BIS piloted mid-career guidance pilots; there is well-established commercial and not for profit courses provision in preparation for retirement; and pre- and post-natal parenting advisory provision in the NHS. Schuller and Watson argue that these forms of individual and collective guidance can usefully be paralleled at other transition points, too

(options when leaving prison or institutional care, moving between areas or countries, but also following bereavement, at risk of redundancy e.g.) (Schuller 2009, NIACE 2014).

Targeted entitlements

The success of Individual Learning accounts in engaging a wide range of adults in undertaking learning of their own choice (before fraudulent providers brought the initiative to an end), alongside the 1980s ILEA pensioner entitlement to attend any number of classes for a single £1 enrolment fee (Tuckett 1988) and more than twenty years' experience of Ford Motor Company's Employee Development Action Programme – all point to the merits of entitlements in triggering participation, when allied to easily accessible provision. Schuller and Watson (Schuller 2009) distinguish between legal entitlements (to free tuition in basic skills up to level 1), financial entitlement (courses up to level 2), alongside targeted entitlements at key transitions. Targeted entitlements for people who benefited least from earlier education, coupled with promotional campaigns to encourage take-up worked well in the Skills for Life campaign, and would benefit revisiting (see Appendix 7).

Outreach and taster provision in areas of low participation, accompanied by promotional campaigns

Supply stimulates demand in adult learning. Outreach work, coupled with taster provision has been a successful component of strategies to stimulate participation among groups with low levels of participation (McGivney 2000), but has reduced, if not disappeared with funding cuts and changed priorities in recent years. Initiatives like Adult Learners' Week (initiated in the UK and spread to 55 other countries), the BBC's Second Chances programme and Skills for Life all point to the mobilising impact of broadcast and media supported initiatives to increase participation and public health initiatives offer a wealth of complementary evidence of the usefulness of combining innovations in programme offer with media campaigns (see appendix 8).

Appendix

1. Inter-generational learning and its impact Tuijnman in a 1991 transnational review summarised ‘the best single predictor of later participation in education is earlier participation (Tuijnman 1991).

In a 1997 study analysing National Child Development Study data Feinstein and Symons conclude that parental interest in secondary children’s schooling has more than four times the influence of social class on young people’s educational performance at 16 and peer groups, though less important, also have significant impact. These findings confirm an earlier study on the impact on primary children (Feinstein and Symons 1997).

However, in a study for DfES summarising research evidence, Feinstein et al (2004) found that the most important influences on a child’s educational attainment in early years are parental education and income. Family structures (single parent families, teen parents, multiple child families) are not significant in themselves. Neighbourhood (where one lives) also impacts.

Bynner and Parsons’ analysis of parents’ and children’s literacy and numeracy skills showed that at entry level 2 or below there was a marked increase in poor literacy/numeracy being transferred inter-generationally (Bynner 2006).

Poor child literacy is a strong predictor for low levels of participation later.

Brooks et al showed that skills improvements made in family literacy programmes that engaged parents and children had lasting positive impact on adults and children alike (Brooks 1997).

In a study of 200 parents and adult children in Wales, combining statistical data and semi-structured interviews find that 46% of children who are lifelong learners have parents who are also lifelong learners, and 61% of non-participant children have non-participant parents (Gorard 1999).

2. Learner identity

Rees et al argue that propensity to learn is shaped early in life by the interaction of family and neighbourhood expectations, early educational experience and social class considerations that shape the ‘taken for granted presuppositions’ that shape their perspective. They see individuals’ engagement with education, and their ‘learner identity’ shaped first by the resources available to them (significantly different in learning confident families and communities) and secondly by their capacity to, draw effectively on their prior experience to avail themselves of opportunity (Rees 1997). Bronfenbrenner’s ecological model, for understanding the self in context posits that individuals exist in multiple, multi-layered and interacting contexts (home, school, work, community) and that each influence and constrain the free choices individuals make (Bronfenbrenner 1979, 1986). Schuller et al argue that learning addresses three interacting capitals (human, social and identity), and that people engage in learning both to sustain as well as transform their lives. In this context the significance of significant life changes/transitions is that they afford an opportunity to review identity (Schuller 2004).

3. Life experiences and learning

Life transitions then present opportunities for adults to examine the potential for engaging with learning afresh. Sargent (2002), reporting on a national representative sample survey of 4896 adults 17 plus, highlighted the relationship of participation to recent life experiences to explore how far life experiences trigger participation:

53% of people who reported wanting 'to help my children learn' are current/recent learners, as are:

66% of adults who 'have started a new job/been promoted';

60% of adults who 'have moved home/moved to a new area';

44% of adults who 'have started a family';

67% of those who 'wanted/want promotion at work';

54% of those who 'have been involved in a broken marriage/broken up with my partner';

29% of those who have 'taken early retirement/retired'.

The same study maps attitudes to learning. It shows over 90% think that 'learning is something people do throughout their lives'; yet 25% say they have done none since school, and whilst 74% overall say 'I am confident about learning new skills' the number drops to 55% for adults who report no learning since school.

Asked about reasons for taking up learning 62% reported personal development reasons; 53% work-related reasons; 27% gave education/progression reasons and 6% said it was not their own choice.

4. Older learners

There is a marked shift in adults' interests in learning through the life cycle (Schuller 2009). Broadly up to the age of 45 adults who are in work or seeking employment predominantly choose to study work-related subjects. Beyond 45, adults express an interest in learning languages, history, philosophy and personal development related activities – all areas where there has been a marked reduction in public provision in the last decade (Aldridge 2007). However, surveys demonstrate that after 54 participation (especially in formal courses) and desire to continue to learn diminish – with 72% 50 - 74 and 91% 75 plus saying they were unlikely to learn in future. 25% of Sargent's 2002 cohort say they have no interest in learning (35% 55 plus); and 13% of the overall cohort say 'I feel I am too old'. There is a sharp differentiation between the learning rich older adults, who organise Universities of the Third Age, take Saga learning cruises, organise reading groups and people who had little engagement with or success in education (McNair 2012).

5. Technology

It is a propensity to learn that stimulates creative uses of technologies, and then positive learning experiences generates new appetite for learning. Beyond a rise across the age span to learn how to use computer technology effectively, that was evident between the early 90s and late 2000s, and is now less evident, technology does not of itself generate a propensity to learn (White 2011, 2012).

6. Supply and demand

There is strong evidence that well-advertised supply stimulates demand. In Inner London, when ILEA policies entitled pensioners to attend as many classes as they liked for a single £1 fee, 35% of inner London pensioners took classes (perhaps initially because it was cheaper than heating your own home (Tuckett 1988)). Once ILEA closed pensioner participation levels in inner London plummeted. Individual Learning Accounts, which shifted initiative and choice onto individuals, were introduced in 1997 and stimulated huge demand from learning rich and poor alike, until a combination of excess demand and fraudulent supply led to the scheme's closure. However, targeted ILAs have proved successful in Scotland and the Army (Schuetze 2007). At the beginning of the Learning and Skills Council in 2003, a ministerial initiative to stimulate taster sessions of as short as 3 hours led to major demand from 65 plus learners.

7. Entitlements

The failure of the DFES Individual Learning accounts scheme in 2000-2002 to avert fraud through an approved provider scheme should not disguise its impressive reach. Within 9 months of the launch of the scheme, one million people had created accounts, where for an individual commitment of £25, government would invest up to £150 for the first 1,000,000 participants to sign up for Individual learning Accounts, where participants were free to take up the widest range of course offers. After 18 months, when the Government closed the scheme had reached 2,500,000 adults. The key lesson here, for the propensity of adults to participate is that widely advertised incentives can affect individual motivation and choice (King 2013).

8. Impact of motivational campaigns, combined with local outreach initiatives

From 1992 the BBC Second Chance/ Adult learners' week initiative used a combination of outreach, local, regional and national events, backed by television programming and a free telephone helpline to stimulate participation. In 2004, when the DWP put a promotional flyer in every unemployed person's giro cheque, 57,000 people overall phoned the helpline, and from a sample follow-up survey of 500 respondents, a third had taken up a course within six months, and more than 50% were long-term unemployed. As a result of the DfES Skills for Life campaign, 2002-2010, 2,700,000 people gained a literacy, language or numeracy qualification. Central to the suite of promotional measures designed to stimulate participation was a television promotional campaign, The Gremlins, which in 2005 the then Secretary of State claimed was responsible for more than a million gaining a qualification. Similar ratios between callers to the

Factors and motivations affecting attitudes towards and propensity to learn through the life course

helpline, and subsequent course enrolment were reported in a local area study of Skills for Life calls to the LearnDirect helpline (Tuckett 1997, Inman 2009, Campaign 2005).

References

- Advisory Council for Adult Continuing Education. 1982. Continuing education: from policies to practice, Leicester: ACACE
- Aldridge, F., and Tuckett, A. 2007. What older people learn, Leicester: NIACE.
- Aldridge, F., Lamb, H. and Tuckett, A., 2008. Are we closing the gap? Leicester: NIACE
- Aldridge, F. and Tuckett, A., 2010. A change for the better: The NIACE survey on adult participation in learning 2010. Leicester: NIACE.
- Beinart, S. and Smith, P., 1998. National adult learning survey 1997. Sudbury: DfEE
- Biesta, G., Field, J., Hodkinson, P., Macleod, F.J. and Goodson, I.F., 2011. Improving learning through the lifecourse: Learning lives. Taylor & Francis. BIS, 2012. National Adult Learning Survey 2010: Technical Report, BIS Research Report 63a; London: BIS.
- Blossfeld, H, Kilpi-Jakonen, E., Vono de Vilhena, D., Buchholz, S., (eds) 2014 'Adult learning in modern societies', Cheltenham: Edward Elgar.
- Boud, David. "Sustainable assessment: rethinking assessment for the learning society." *Studies in continuing education* 22.2 (2000): 151-167.
- Boudard, E. and Rubenson, K., 2003. Revisiting major determinants of participation in adult education with a direct measure of literacy skills. *International Journal of Educational Research*, 39(3), pp.265-281.
- Bridges, W., 1980. Making sense of life's transitions. Cambridge MA: Perseus
- Bronfenbrenner, U., 1979. The ecology of human development: Experiments by design and nature. Harvard: Harvard UP.
- Bronfenbrenner, U., 1986. Ecology of the family as a context for human development: Research perspectives. *Developmental psychology*, 22(6), p.723.
- Brooks, G., Gorman, T., Harman, J., Hutchison, D., Kinder, K., Moor, H. and Wilkin, A., 1997. Family Literacy Lasts. The NFER Follow-up Study of the Basic Skills Agency's Demonstration Programmes. London: Basic Skills Agency,
- Bynner, J. and Parsons, S., 2006. New light on literacy and numeracy: November 2006. London: NRDC
- Campaign, 2005. Government-heralds-success-illiteracy-gremlins-ad-campaign <http://www.campaignlive.co.uk/article/525471/government-heralds-success-illiteracy-gremlins-ad-campaign> accessed 20.7.2016
- Cross, K.P., 1981. Adults as Learners: Increasing Participation and Facilitating Learning. San Francisco: Jossey Bass

Eurostat (2007) Adult Education Survey

http://ec.europa.eu/eurostat/cache/metadata/en/trng_aes_12m0_esms.htm accessed 31 May 2016

Feinstein, L and Symons, J. 1997 Attainment in secondary schools Centre for economic performance, LSE

Feinstein, L., Duckworth, K. and Sabates, R., 2004. A Model of the Inter-generational Transmission of Educational Success [Wider Benefits of Learning Research Report No. 10]. Centre for Research on the Wider Benefits of Learning, Institute of Education, University of London.

Feinstein, L., Sabates, R., Anderson, T.M., Sorhaindo, A. and Hammond, C., 2006. What are the effects of education on health? In R. Desjardins and T. Schuller (eds.), 'Measuring the effects of education on health and civic/social engagement', Paris: OECD.

Field, J., 1999. Schooling, networks and the labour market: explaining participation in lifelong learning in Northern Ireland. *British Educational Research Journal*, 25(4), pp.501-516.

Field, J., 2005. *Social capital and lifelong learning*. Bristol: Policy Press.

Field, J., Gallacher, J. and Ingram, R. eds., 2009. *Researching transitions in lifelong learning*. Routledge.

Fuller, A., and Unwin, L. 2006. Expansive and restrictive learning environments in Evans, K., Hodkinson, P., Rainbird, H., and Unwin, L. (eds.) *Improving Workplace Learning*. London: Routledge

Gegenfurtner, A., and Vauras, M. 2012. Age related differences in the relation between motivation to learn and transfer of training in adult continuing education, *Contemporary Educational Psychology* 37.1 pp33-46

Gorard, Stephen, Gareth Rees, and Ralph Fevre. "Patterns of participation in lifelong learning: do families make a difference?." *British Educational Research Journal* 25, no. 4 (1999): 517-532.

Gorard, S. and Smith. E., 2007. Do barriers get in the way? A review of the determinants on post-16 participation. *Research in Post-Compulsory Education* 12: pp 141-148.

Green, A., Preston, J. and Malmberg, L.E., 2004. Non-material benefits of education, training and skills at a macro level. *Impact of education and training. Third report on vocational training research in Europe: background report*. Luxembourg: EUR-OP (CEDEFOP reference series 54).

Inman, E.H.G. 2009, 'The effectiveness of the response and follow up processes to the LearnDirect Gremlins campaign in the Nottingham area, PHD theseis, Durham University.

Kelly, Thomas. 1970 A history of adult education in Great Britain. Liverpool: Liverpool University Press.

King, A., and Crewe, I. 2013, The blunders of our governments, London: OneWorld.

Lave, Jean, and Etienne Wenger. 1991 Situated learning: Legitimate peripheral participation. Cambridge: Cambridge UP.

Larsen, Kurt. "Learning cities: the new recipe in regional development." Organisation for Economic Cooperation and Development. The OECD Observer 217/218 (1999): 73.

Longworth, Norman. Learning cities, learning regions, learning communities: Lifelong learning and local government. Routledge, 2006.

Macleod, F. and Lambe, P., 2007. Patterns and trends in part-time adult education participation in relation to UK nation, class, place of participation, gender, age and disability, 1998–2003 1. International Journal of Lifelong Education, 26(4), pp. 399-418.

McGivney, V. 1990 Education's for other people: Access to education for non-participant groups, Leicester: NIACE

McGivney, Veronica. 2000. Recovering Outreach: Concepts, Issues and Practices. Leicester, NIACE

McNair, S., 2012. Older people's learning: a survey Leicester: NIACE

Meadows, P. and Metcalf, H., 2007. Evaluation of the impact of Skills for Life learning: longitudinal survey of learners, Wave 3. London: IOE

Merriam, S.B., 2005. How adult life transitions foster learning and development. New directions for adult and continuing education, 2005(108), pp. 3-13.

National Institute of Adult Continuing Education, 2014 'Mid career review', Leicester: NIACE

National Institute of Adult Continuing Education 2015 unpublished data from a representative sample of UK adults' participation in adult learning.

Nunn, A., S Johnson, S Munro, T Bickerstaffe, S Kelsey – 200. Factors affecting social mobility London DWP

OECD, 2007. Understanding the Social Outcomes of Learning Paris: OECD

OECD, 2013. OECD skills outlook 2013: first results from the survey of adult skills, Paris, OECD.

Raffe, D., 1979. The 'Alternative Route' Reconsidered: Part-Time Further Education and Social Mobility in England and Wales. Sociology, 13(1), pp.47-73.

Rees, G., Fevre, R., Furlong, C.J. and Gorard, S., 1997. History, place and the learning society: towards a sociology of lifetime learning. *Journal of education policy*, 12(6), pp.485-497.

Rubenson, K., 2006. The Nordic model of lifelong learning. *Compare*, 36(3), pp.327-341.

Rubenson, K., 2007. Determinants of formal and informal Canadian adult learning insights from the adult education and training surveys. Toronto: Human Resources and Social Development Canada

Rubenson, K., 2009. Between humanism and global capitalism. *The Routledge international handbook of lifelong learning*, p.411-

Sargant, N., 1991. Learning and 'leisure', Leicester, NIACE.

Sargant, N., Field, J., Francis, H., Schuller, T. and Tuckett, A., 1997. The learning divide. Leicester: Niace

Sargant, N., and Aldridge, F. 2003 Adult learning and social division: a persistent pattern 2 vols., Leicester: NIACE.

Schlossberg, N.K., 2005. Counseling adults in transition: Linking practice with theory. New York: Springer.

Schuetze, H.G., 2007. Individual learning accounts and other models of financing lifelong learning. *International Journal of Lifelong Education*, 26(1), pp.5-23.

Schuller, T., Preston, J., Hammond, C., Brassett-Grundt, A., and Bynner, J. (2004), 'The Benefits of Learning: The Impact of Education on Health, Family Life and Social Capital, London: Routledge Falmer.

Schuller, T., and Watson, D., (2009) Learning through life, Leicester: NIACE.

Snape, D., Tanner, E., Sinclair, R., with Michaelson, J., and Finch, S. 2007. National adult learning survey (NALS) 2005. London: DES.

Sutherland Olsen, D., 2016. Adult Learning in Innovative Organisations. *European Journal of Education*, 51(2), pp.210-226.

Tuckett, A. (1988) The jewel in the crown London: ILEA.

Tuckett, A., 1997. Motivation is curriculum: stimulating demand for further education among under-represented groups by collaboration with the media in Sargant, N. and Tuckett, A., Pandora's Box Leicester: NIACE

Tuijnman, A., 1991. Lifelong education: A test of the accumulation hypothesis. *International Journal of Lifelong Education*, 10(4), pp.275-285

Tuijnman, A.C., 2003. A "Nordic model" of adult education: What might be its defining parameters?. *International journal of educational research*, 39(3), pp.283-291.

UDACE, 1986 The challenge of change Leicester: NIACE.

White, P., 2011. Modelling the 'learning divide': predicting participation in adult learning and future learning intentions 2002 to 2010. *British Educational Research Journal*, 38(1), pp.153-175.

White, P and Selwyn. N., 2012. 'Learning online: Educational internet use and participation in adult learning 2002-2010 *Education Review* 64(4), pp.451-469

Wlodkowski, R. 2008 *Enhancing adult motivation to learn: a comprehensive guide for teaching all adults*. San Francisco: Jossey-Bass.



© Crown copyright 2016

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication available from www.gov.uk/go-science

Contacts us if you have any enquiries about this publication, including requests for alternative formats, at:

Government Office for Science
1 Victoria Street
London SW1H 0ET
Tel: 020 7215 5000
Email: contact@go-science.gsi.gov.uk

GS/15/XXX