

Research Summaries: Embedding Literacy and Essential Skills

Title:	"You wouldn't expect a maths teacher to teach plastering...": Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning achievement
Document type:	Report
Year:	2006
Research Question:	What impact does "embedding" literacy, language (ESL) and numeracy (LLN) in vocational programs have on learner outcomes in those programs?
Bottom line answer:	"Embeddedness" was associated with higher learner retention, course success rates and increased rates of learners achieving national literacy, ESL and numeracy qualifications.
Key Concepts:	LLN is "embedded" in a vocational program to the extent that learners 'experience LLN development' as part of their vocational studies. They measured "embeddedness" against a four point scale (non-embedded, partly embedded, mostly embedded and fully embedded).
Reference:	Casey H, Cara O, Eldred J, Grief S, Hodge R, Ivanic R, Jupp T, Lopez D and McNeil B (2006): "You wouldn't expect a maths teacher to teach plastering...": embedding literacy, language and numeracy in post-16 vocational programs – the impact on learning and achievement. London: National Research and Development Centre for adult literacy and numeracy. Retrieved 03-01-11 from http://www.nrdc.org.uk/publications_details.asp?ID=73#
Study design:	A sample of 1,916 learners in 79 vocational programs in further education colleges was followed in the 2004-05 academic year. The researchers developed a scale to measure levels of embedding based mainly on the perceptions of learners as expressed in interviews and focus groups. The researchers also observed classes and examined course documentation. Against the scale of embeddedness,, the researchers measured learners' attitudes, retention and achievement.
Limitations:	The study was limited to vocational programs in further education colleges.
Background:	The practice of embedding LLN into vocational study had recently been given new impetus in the UK by the government's Skills for Life strategy for improving LLN skills.
Synopsis:	"Embeddedness" was associated with higher learner retention, course success rates and increased rates of learners achieving national literacy, ESL and numeracy qualifications.

Research Summaries: Embedding Literacy and Essential Skills

Title:	Improving Literacy at Work
Document type:	Report
Year:	2011
Research Question:	When, and how, do workplace courses for the low-paid succeed, in what ways, and what difference does it make in people's lives?
Conclusion:	Test scores did not show that the courses actually improved literacy skills. However there were less tangible benefits: some learners reported reading more than before and had a more positive attitude to education, and there was an increase in those seeking further formal education after the courses.
Reference:	Wolf A and Evans K (2011): Improving Literacy at Work. London: Routledge
Study design:	<p>A five year longitudinal study involving over 500 learners in 53 different workplaces in England and Scotland as well as managers, tutors and union officials.</p> <p>There are different ways of seeing literacy: as a well-defined set of technical skills (human capital) or as social practice. One can also focus on the individual learner or on the social organization of learning as the object of study. Literacy seen as a set of technical skills can be studied as a primarily individual or social issue, as can literacy as social practice. In order to measure outcomes as seen from these different perspectives and to be able to track outcomes over time, the researchers used a mix of qualitative and quantitative measures. Learners were formally tested three times on reading and writing using the Go! Test developed by the UK National Foundation for Economic Research (NFER). The courses generally offered around 30 hours of tuition.</p>
Limitations:	The courses studied were short; longer courses could have different results. However the 2010 Department of Labour study in New Zealand suggests otherwise.
Background:	Adult literacy has become a priority for recent governments in the UK, largely for economic reasons. However, there has been little research on the workplace as a site for adult learning, and less still on provision aimed at low-paid workers.
Synopsis:	<p>The researchers carried out a five year longitudinal study involving over 500 learners in 53 different workplaces in England and Scotland. A mixed approach was used to capture the technical, individual and social aspects of possible literacy course outcomes.</p> <p>There was little evidence that the courses led to a broad consistent improvement in skills. The variation in results for groups of learners suggests that the "one-size fits all" nature of the programs resulted in many cases where provision was mismatched with the needs of many learners, and that positive outcomes are more likely in workplaces where learners have opportunities to use their literacy skills.</p>

Research Summaries: Embedding Literacy and Essential Skills

Article Title:	Embedded teaching and learning of adult literacy, numeracy and ESOL: seven case studies
Document type:	Report
Year:	2005
Research Question:	What are the characteristics of embedded LLN teaching and learning, and what makes it effective?
Conclusion:	Embedding is most effective when the LLN teacher supports students in applying the skills in workshop activities. Teamwork between the teachers is essential; successful teams were the ones that were strongly motivated, willing to learn from each other, and had the time to work and plan together.
Reference:	Roberts C, Baynham M, Shrubshall P, Brittan J, Cooper B, Gidley N, Windsor V, Eldred J, Grief S, Castellino C and Walsh M (2005): Embedded teaching and learning of adult literacy, numeracy and ESOL: seven case studies. London: National Research and Development Centre for adult literacy and numeracy. Retrieved 03-01-11 from http://www.nrdc.org.uk/publications_details.asp?ID=21#
Study design:	Used an ethnographic approach of seven case studies with repeated classroom observations and interviews with teachers and learners
Limitations:	A small number of sites were observed, so one should be careful about generalizing the findings.
Background:	The national (UK) skills strategy aimed to increase the number of people with a level 2 vocational qualification. However, weak literacy, language or numeracy (LLN) skills pose an obstacle to many people who would be interested in getting a qualification. It was thought that many would not wish to attend LLN classes but could accept LLN instruction as an integral part of a vocational course. Consequently the Skills for Life Strategy Unit funded the development of learning materials for embedded learning.
Synopsis:	<p>The UK government encouraged the embedding of literacy, language or numeracy (LLN) in vocational courses as part of Skills for Life. The researchers sought to find the characteristics of embedded LLN teaching and learning, and what makes this embedding effective. They used an ethnographic approach with repeated classroom observations and interviews with teachers and learners. The seven case studies describe examples of embedded approaches in practice. They show that integrating LLN into vocational courses allows learners to see those skills as simply ones they need to do the job. Embedding is most effective when the LLN teacher supports students in workshop activities that require use of the skills. Teamwork between the teachers is essential; successful teams were the ones that were strongly motivated to provide embedded learning, willing to learn from each other, and had the time to work and plan together.</p> <p>Separate case studies for each site are available online with this report.</p>

ⁱ New Zealand Department of Labour. (2010). Upskilling Partnership Program: An evaluation. Retrieved June 21, 2011, from <http://www.dol.govt.nz/publications/research/upskilling-evaluation>