

Benseman, J. (2010). Transferring literacy skills in the workplace. *Reflect*, 13 (Summer), 9-11.

Implicit, if not explicit, in most workplace training programmes is the assumption that the knowledge and skills taught are not only internalised by the participants, but also transferred back into the workplace, with a resultant improvement in work performance by the workers and cumulatively for employers. There is, however, very little research evidence about how much this transfer of learning actually occurs and what factors might impede or facilitate this process. A recent study from New Zealand sought to provide some insights into this process.

Based in Auckland, Fletcher Aluminium employs approximately 200 staff most of whom come from low-skill backgrounds. Eighty-five per cent of employees speak a language other than English (mostly Pacific languages) as their first language.

The company began its workplace LLN* programme four and a half years ago, in response to concerns about understanding company procedures (including health and safety) and product specifications, wastage, interpreting graphs, tracking orders and ensuring on-time delivery.

Following a company-needs analysis, the provider designed a curriculum which was then further interpreted by the tutor in terms of the individual workers' specific job tasks and learning needs. Each participant works one-to-one with the tutor for an hour per week for a total of 48 weeks.

Over a six-month period, the researcher tracked the progress of eight employees who had started a new LLN course in mid-2009. The group comprised one woman and seven men; all born outside New Zealand (predominantly Tonga). Their average age was 43.3, they had been in New Zealand an average of 20 years and with the company for an average 7.1 years. Through a series of telephone and face-to-face interviews with the learners and the course tutor, the researchers explored the impact of their LLN learning on their working practices.

Four levels

The project used Kirkpatrick's evaluation model, in which transfer of new LLN skills back into the workplace equates with Level 3.

Level 4: Results	To what degree targeted outcomes occur, as a result of the learning event(s) and subsequent reinforcement.
-------------------------	------------------------------------------------------------------------------------------------------------

Level 3: Behaviour	To what degree participants apply what they learned during training when they are back on the job.
Level 2: Learning	To what degree participants acquire the intended knowledge, skills, and attitudes based on their participation in the learning event.
Level 1: Reaction	To what degree participants react favorably to the learning event.

A recent review of this 50-year old model included the observation that relatively few [learning professionals] know how to effectively get beyond Level 2. When presenting these concepts to groups of professionals, we often refer to current evaluation practice as 'smile sheets (L1), pre and post-tests (L2), and hope for the best (L3 and L4)'.¹

Transfer of learning to the workplace

All eight learners were able to identify how the teaching content was of direct relevance to their jobs. Even where the content was reasonably generic such as 'phonemic awareness', learners understood why these skills were important in the longer term for their jobs. All the learners reported throughout the study that they felt they were making 'good progress'. The tutor confirmed these observations, with only one person described as 'steady' and one as 'a long road'.

Feedback from the learners and the tutor showed that all the course participants were using at least some of their new skills in their jobs:

- *Use of technology* (computers, including email, health and safety software) which has been steadily increasing in the plant over the past and replacing paper-based systems.
- *Completion of paperwork* for those still using paper forms (e.g. daily reports, loading time-sheets, incident reports) has improved.
- *Improved accuracy and efficiency with calculations and measuring.*
- *Better oral communications* which are an important part of ESOL-related issues and the multicultural nature of the workforce.
- *Wider transfer* – a number of the learners also talked about how they were able to use their skills at home.

About half the group specifically mentioned growing independence in their literacy-related work tasks. For example, where previously these learners often asked workmates or supervisors to do (or help with) their paperwork, they were now doing it themselves because their LLN skills had improved. Although the level of progress they had made varied, several reported that they had now reached a point where they were using these skills independently as an integral part of their jobs.

Case study - coping with calculations

In D's work as a packer, he used to guess totals of products to go into a case or use a calculator (which he used to have to retrieve from another area). The result was an uneven end product because of his inconsistent counting. D has been working on his maths skills with his tutor, particularly multiplication and division. As a result of his improved maths skills, his packing work is now all calculated in multiple lots (bundles of 3, 4 and 5). 'It's made the job easier, I now do it straight from my head. I reckon I do two or three extra cases, not having to go and get a calculator.' He feels much more confident about his maths abilities and their application - 'I'm not scared of them (calculations) any more - I used to run away.' Despite this progress, he still feels he has some way to go - 'I'm nearly in the light, just about there.' He is particularly proud that his workmates now get him to check their figures.

Case study - emailing with confidence

C has been working on his reading and spelling skills with the tutor; he has reached a point now where he feels confident enough to start using emails: 'I use them in the mornings now. When we are loading the trucks in the morning, customers send in emails to the dispatch area with last-minute changes and I have to confirm the loads to the customers. I'm still not very good at my typing, but I haven't had any complaints from customers so far.'

Case study - communicating within the team

B says that his improved oral English means that he now gives instructions to temps. He shows and explains procedures by telling rather than just showing, which is what he used to do - 'they understand what I want now'. He also finds his improved English useful for communicating with leading hands and engineers when something goes wrong with machines and quality issues.

He says that only a few people speak up at team meetings about things like safety issues, new ideas. As result of practising English on the course and an increase in his vocabulary, he has greater confidence in speaking English and now speaks up at meetings - 'I'm not a confident person, I didn't talk at team meetings, but I've started to now.'

B is now doing online banking on his home computer as well, which means that he now only rarely has to visit his bank. He also says that his own progress has made him appreciate the importance of education for his children - 'one thing I've learned is how important school is for my kids. It might be a bit late for me, but not for them.'

Factors linked to transfer

This study identified a number of factors that could facilitate and impede the transfer of learning into people's jobs. While the small sample means that it is not possible to indicate their relative importance, they still provide a useful starting point for follow-on studies.

Teaching content that is based on both a company- and individual-needs analysis is clearly important. If the skills being learned are issues of importance to the learners, then there is a much higher likelihood that learners will be interested in what is being taught and motivated to improve the skills related to these issues.

Linked to this is the degree of contextualisation of the teaching content. Using 'realia' of everyday documents and processes as the medium for teaching LLN skills also increases learner motivation and minimises the distance between the skill being taught and its application.

The skill level of the learner also influences the amount of time it takes before a skill can be transferred back to the job. If someone is just starting out in their use of computers, it will take some time before this worker is able to integrate it into daily work routines. Others are closer to applying their skills because their skill levels are higher and therefore more readily transferred.

Along similar lines, the nature of the LLN skill being taught is also a factor. Some LLN skills (eg some aspects of maths) are probably more discrete and can be taught more readily than others (eg poor English pronunciation that is strongly established) and can be more readily transferred.

The worker's environment is clearly important. Supportive supervisors, who encourage workers to practise new skills on the job and provide affirmation for doing so, help transfer. Learners commented that supervisors often become much more supportive when they saw the impact of the course on the learners. It should also be recognised that the learners don't always 'hit the ground running' and may need some time to experiment and consolidate their skills.

A good example of positive environmental factors is incentives. At Fletcher Aluminium, a monthly grocery voucher draw is offered for people who have put in hazard reports. The course participants thought this was a great idea and provided a real incentive to produce better reports and make these public among their workmates.

The tutor has a central role in the process. In this case, the tutor has worked with the company on-site for four and a half years. Consequently, she knows staff and plant processes well and can ensure a constant fit between the teaching content, the learners'

needs and the company's aims – 'the longer I'm here, the more relevant I can make it because I understand what they do in their jobs so much better'.

A second feature of the tutor in this programme is her close liaison with the participants' supervisors to provide feedback to them on the learners' progress on the course on the one hand and gain feedback on job demands/issues from the supervisors on the other. As someone on-site for much of the working week, the tutor can clearly have a proactive influence on the transfer process.

Finally, the learners themselves influence the process. Transfer is built on an assumption not only of new skills being learned and a reasonably positive work environment, but also the learners themselves being motivated to change their work practices as a result. While changing work practices using new skills is probably intrinsically positive in itself in most cases, other factors (eg conditions of employment, personality clashes) can interfere with the process.

Each of these factors warrants further depth of exploration across a range of different work contexts. What can be seen from the present study however, is that transfer of learning does occur, albeit at different speeds and in different ways.

References

(1) Kirkpatrick, J. and Kayser Kirkpatrick, W. (2009) *The Kirkpatrick four levels: a fresh look after 50 years, 1959–2009*.

www.managesmarter.com/managesmarter/images/pdfs/trg_20090417_kirkpatrickwhitepaper.pdf