

Military e-learning: Lessons for open, distance and flexible education

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The UK, Australian and US armies have all implemented various forms of e-learning, and have all used processes that open, distance and flexible educators would consider successful. All three armies have carried out reviews of their e-learning provision and considered its effects on recruitment, retention and effectiveness. This not only makes a comparison timely but also offers an opportunity to reflect on the success factors for e-learning in other settings. The presenters have carried out a wide range of interviews with UK soldiers, tutors and senior officers, and have compared UK e-learning systems with those of the US and Australia.

E-learning in the UK army

Overview

The UK army's whole life development programme was initiated in 2001. This programme provides for the needs of army personnel, their families and others properly using army bases, such as civil servants, with the intention of meeting their lifelong learning requirements.

Much of this elective programme is delivered through over 100 Army Learning Centres (ALCs). These facilities give access to a variety of learning opportunities, most of which are delivered online through the internet. This situation contrasts with the provision in other countries where the bulk of delivery is training, not elective learning and, furthermore, is usually delivered through the individual's personal computer.

The provision is centrally managed in the UK army, even where the ALC is overseas. Courses are largely free of charge, or at minimal cost to the soldier or their family. Even where a charge is made, soldiers have access to elective learning 'credits'.

The UK army is striving to become a 'learning organisation'. It wants to engender in its workforce greater flexibility in order to help meet anticipated reductions in overall staffing and to increase its capacity to respond to a continually changing set of circumstances. With greater use of technology, decisions are being made at lower levels, often by individuals, that potentially affect the reputation and safety of larger groups. Soldiers are required who are more self-directed and reflective than heretofore. The UK army is beginning to set ambitious targets in such areas as basic or key skills and in IT, and to provide mechanisms for achieving them.

Learning centres

ALCs contain a suite of computers, each of which is equipped with access to a wide variety of elective learning opportunities. Because ALCs deliver elective learning only, unlike the situation in other countries, security is not a problem and civil servants, families and others can walk in and sign up for courses. Indeed, as part of agreeing to use certain products and act as open learning centres, such access is contractually expected. Any facilities not being used for

courses are available for internet browsing and other personal use. The boundary between formal and informal learning is hence by no means rigid.

When open, ALCs are always staffed by a 'navigator' who is available for registration, advice and basic IT support. Navigators also act as systems' managers and handle such aspects as connectivity. Navigators have expertise in many of the courses on offer. When the ALCs were being installed, the navigators were chosen for their technical expertise, but now they are increasingly selected for their ability to empathise with learners.

A small number of ALCs are mobile and are taken into active engagement areas, so that soldiers can make good use of their off-duty time and remain in email contact with their family.

Government funding flows to the army for successful delivery of elective learning, as this improves the subsequent employability of soldiers and dependents. Accordingly, a fairly formal registration and assessment regime is followed.

By contrast in the US, the soldier is assumed to have a personal computer and is expected to learn in a more independent environment. Learning is not routinely made available to families in either US or Australia, though it is under consideration in the latter case.

Curriculum

Much of the curriculum is truly elective and covers such topics as health and safety, equal opportunities, language-learning, theoretical aspects of fork-lift truck driving, management and advanced IT skills. However, some topics, whilst elective to the individual, are a necessary pre-requisite for promotion or for bringing basic skills up to an acceptable level.

Indeed, basic skills and the assessment of them, form a major part of the curriculum. The emphasis has been on literacy, but a move into numeracy is underway. Most assessment of basic skills is now undertaken through e-learning, but the delivery is more likely to involve at least some face-to-face teaching.

At the moment, a major component of elective learning in the UK army is in the acquisition and accreditation of IT skills, in particular, the widely accepted European Computer Driving License (ECDL) suite of seven modules. Whilst elective, it is anticipated that this learning will become compulsory in the near future, even if the resulting assessment and accreditation is not. Indeed, one role for elective learning is to pilot topics that will eventually become essential.

Blended models

For delivery within ALCs, the model is primarily online with local navigator support. However, many ALCs are situated within or adjacent to larger army centres where face-to-face training is the norm. There is a growing awareness that a mix of blended learning models could be the way forward for both elective learning and compulsory training.

An example is afforded by basic skills: sometimes within the same building there will be courses covering the same material delivered entirely face-to-face, or entirely online or a combination of the two (blended). An investment has been made in a cohort of basic skills tutors, who advise and mentor soldiers choosing between these three models and monitor their progress.

Commonwealth citizens, for instance from Nepal or the Philippines, make up a significant part of the UK army. Special blended models of learning are being developed with the aim of allowing these soldiers to integrate with their peers.

Success rates

The UK army achieves very high success rates and completion rates in many elective learning situations delivered in-house. Figures vary from course to course, but in IT (ECDL courses for instance) overall successful exam completion rates are typically double the national average for those starting the course. By contrast, success rates on traditional distance learning courses delivered outside army facilities are very much in line with those of other students. For instance,

Open University module completion rates show no significant differences between army students and others.

We have conducted a significant number of interviews to attempt to understand success rates in the UK army. As a result, we believe that four factors account for the bulk of the variation. These are:

1. The leadership given by many senior officers and line managers
2. The support offered by the ALC environment and the assistance of navigators.
3. The fact that there is a filtering process by the navigators which prevents unsuitable registrations
4. The integration of the courses into the training and other activities of the soldiers.

Where these four elements operate, the system shows many of the characteristics of very good practice: soldiers who have 'discovered education' and have developed the 'habit of learning'; the ethos of the army (discipline and motivation) working to reinforce the learning culture; soldiers recognising the huge opportunity that the army has provided them. A commonly quoted result is overall increased self esteem.

In conducting the study, we have observed considerable variability in support from the chain of command e.g. time off allowed for education or lack of role models from superiors. In a hierarchical structure such as the army, the effect of a General sitting down in an ALC to study computing, as we observed in Northern Ireland, is considerable. This effect has also been observed in Australia (Newton & Ellis, 2005a).

We also observed variability in the management and use of ALCs – some too busy; others nearly empty; some navigators very facilitative; others indifferent. Further differences arose from the level of integration of ALCs into the whole learning environment. This was better achieved in centres outside mainland Britain.

Learning on the move

As Newton and Ellis point out, the constant churn in location and duties, which is an inevitable part of army life, is not immediately conducive to elective learning, especially when delivered in cohorts face-to-face (Newton & Ellis, 2005b). Considerable effort has been put into facilitating e-learning as the soldier moves around, for example, by standardising ALCs and their curriculum, but more needs to be done to provide continuity of support, especially in basic skills.

Emphasis is therefore on blended models giving a core set of elective opportunities that are provided in all locations with face-to-face meetings repeated at a reasonable frequency and with modularised content to allow for material to be studied in different orders.

A priority for the UK army is not to disadvantage those in the field in terms of promotion. Accordingly, an immediate priority is the delivery of courses required for promotion e.g. the command, leadership and management suite of modules undertaken by all non-commissioned officers.

The flexibility offered by the US army is much greater and soldiers have more opportunities to register for courses; however, this very flexibility makes support harder to provide and pressures on manpower levels are generating support problems. Face-to-face learning is the norm, and again courses relevant to promotion are prioritised.

One of the problems for the UK, not present to the same extent in Australia and the US, is tracking soldiers and keeping their portfolio of educational and other achievements up to date. This is due to a large number of non-communicating computer systems. It is virtually impossible for a manager to find out what skills are held within any particular large group of soldiers e.g. Arabic speakers or Microsoft-certified engineers. As with higher education, the possibility of using e-portfolios is under consideration in the UK army, which would help address the problem of churn.

Benefits of elective learning

Elective learning in the UK army is not offered for purely philanthropic reasons. A recent study (Hanlan et al., 2004) showed that gearing ratios in excess of 3:1 were obtained for expenditure on elective education and especially the ALCs. Benefits include:

1. improved recruitment;
2. improved retention;
3. fewer incidents and accidents;
4. better performance.

US, UK and Australian armies have put effort into mapping their training onto civilian qualifications, and into identifying any missing components and making them available, usually as elective options. Such qualifications can be professional, skills-based or academic. Our work supports the conclusion that such opportunities play a major role in the decision to enlist and in the support given to the recruit by their family.

Strong evidence for the effects on retention and performance were also observed in an American study (Sticha et al., 2003). Paradoxically there is little doubt that the availability of opportunities to acquire civilian qualifications substantially improves retention. A soldier who knows that getting a civilian job will be relatively easy, is more inclined to remain in the army. A variety of internal UK army attitudinal surveys support this conclusion.

There is emerging evidence that some educational deficits constitute health and safety risks. Hence addressing the literacy and numeracy deficits of soldiers leads to fewer accidents. As some of the rules of engagement are inherently complex, this is by not a basic level problem. Increasingly, soldiers need to have cultural, communicative and person skills to be able to operate effectively.

Lessons for higher education

The importance of recognized, professional qualifications alongside academic ones is already beginning to have an impact in both the army and higher education. For example, students increasingly want to have an IT degree with a professional or manufacturer qualifications alongside. Examples include professional exemptions from IEE or accreditation as a certified Microsoft engineer. ECDL is popular with all students at many European universities. To date, such a qualification has been viewed as an add-on, but with increased competition for students, a more formal approach to facilitating both forms of accreditation is advisable.

In spite of the hierarchical nature of the army, it was apparent from the interviews that a personal sense of motivation was key to the take-up of elective learning. Invariably, successful learners spoke of increased self-confidence and self-expression. Both of these qualities are sought after in higher education as well as in the context of the modern army.

A major difference we identified in our study was the importance in the army of endorsement of learning by the chain of command. This top-down impact is potentially at odds with the idea of self-directed learners which is so valued in higher education. However, we also observed in the UK army the high significance of peer support and peer pressure in driving success in elective learning. While the importance of team work is evident in the army, it is only recently that it has been valued in higher education.

In a higher education environment, it is perhaps too easy to dismiss the role of technical and administrative support. Our study shows that this support has a significant effect on retention, especially where a learner undergoes a disrupted experience. The army is good at coping with learners who take time out or are injured; higher education could be more facilitative in this area.

Not surprisingly, pressure of time was cited by our interviewees, just as with learners in higher education. E-learning, being more flexible than face-to-face training, goes some way to addressing this problem, both in the army and in higher education.

As they move towards becoming learning organisations, the UK, US and Australian armies are experiencing many of the same issues and problems as higher education. The two sectors should learn from one another.

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