

Northumbria Research Link

Citation: Leggett, Ruth and Graham, Sue (2011) Impact of HE-level work-based learning: an overview of stakeholder perspectives and a proposed model for evaluation of impact. In: Universities Association for Lifelong Learning Conference, 28-29 June 2011, University of Wales Institute, Cardiff.

URL: <http://www.uall.ac.uk/> <<http://www.uall.ac.uk/>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/8878/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

www.northumbria.ac.uk/nrl



Impact of HE-level Work-based Learning: An overview of stakeholder perspectives and a proposed model for evaluation of impact

Sue F GRAHAM

**Work-related Learning Services, Northumbria University
Newcastle upon Tyne, United Kingdom, NE1 8ST**

Ruth C LEGGETT

**Newcastle Business School, Northumbria University
Newcastle upon Tyne, United Kingdom, NE1 8ST**

ABSTRACT

The first part will look at the impact of HE-level work-based learning on learners, employers and academics. This is based on a small-scale qualitative study of learners, employers and academic staff involved in work-based learning programmes and will cover:

- Motivation and expectation – what did learners and employers expect of courses and were these met?
- How did the three groups react to the pedagogical approaches common in work-based learning settings?
- Knowledge – how is knowledge recognised and respected in such programmes
- Impact – personal and professional development experienced by learners, changes in the workplace identified by employers and impact on academic staff.
- What tensions did the three stakeholder groups experience?

The second part of the paper will look at how planning to evaluate the impact of work-based learning programmes at the learning design stage, can improve the legitimacy of the data gathered. Using the author's recent work as a case study, this part will include examples of evaluating impact through using:

- a training needs analysis process to identify individual and organisational needs, linking these to the organisation's strategic objectives and priorities through working collaboratively with key stakeholders
- a range of methodologies during programme design to understand and agree on the expectations of stakeholders and participants as to the desired outcomes of the learning, in order to use these as a measure by which to evaluate the impact of learning on the individual and the organisation
- the assessment process to focus on specific organisational projects to in order to realise particular business benefits as a result of the learning programme

Keywords: Impact, work-based learning, evaluation, stakeholder perspectives

INTRODUCTION

This paper describes a small qualitative study into the impact of Higher Education (HE) level work-based learning (WBL) on learners, employers/organisations and university staff and sets out the need for investigation into this area, placing this study into its policy, institutional, pedagogical, personal, professional and strategic contexts. The second part of the paper will look at how planning to evaluate the impact of work-based learning programmes at the learning design stage, can improve the legitimacy of the data gathered.

SCOPE AND DEFINITIONS

There is much debate about terminology and definitions in this field (Nixon *et al.*, 2006, 49-50) and therefore it is important to define what falls within the scope of this work. This paper looks at *HE level work-based learning in England*. *HE* here refers to learning that is credit-bearing and assessed within a framework recognised by the Quality Assurance Agency and the Framework for Higher Education Qualifications (2001) at level 4 or above.

Work-based learning here refers to a programme of study that is primarily aimed at somebody who is already in employment and who is undertaking a piece of learning based on or around their real work in order to develop themselves professionally but often with the parallel purpose of improving organisational performance in their workplace or profession. Therefore their primary identity is as a worker (we sometimes refer to them as worker-learners or employee-learners) rather than seeing themselves primarily as a 'student' (Field, 2006,52). Many learners will be juggling several roles and will have a different perception of university life than their full-time school leaver counterparts (Merrill, 1999, 202).

The overall aim was to undertake a qualitative piece of phenomenological research in order to find answers to the suggested research questions using mixed methods of data collection in order to achieve triangulation. These methods were focus groups, interviews, questionnaires and the analysis of key documentary evidence. The data and samples were taken from various programmes at my own institution. The findings were analysed and compared in order to produce some analysis and conclusions about the impact, positive or otherwise, of HE level WBL on learners and employers.

PEDAGOGY

The approach taken in the research was to talk about approaches to teaching and learning which I have then tried to hang upon the relevant pedagogical theories. The main things that came from all three groups was a generally positive reaction to the self-directed, negotiated, experiential / reflective and bite-sized approaches used in WBL. Learners were very keen on the ability to link the learning to the real world and the dual purpose of doing a project that would be used to improve practice at work but also to gain them an academic qualification. In addition many talked about the positive impact the course was having on them personally in terms of improved self-esteem and confidence, which was also picked up by the employers. This increased confidence is often attributed to other types of adult education and shows the social and emotional impact of this type of HE. Naturally not all were positive and a minority made reference to preferring a more traditional, 'transmission of knowledge' style of teaching. Therefore it may be important as this type of work grows to ensure learners are clearly inducted into the new learning approaches they may encounter, as an understanding of this may help them to get more out of it.

All the groups mentioned the importance of peer support and learning from each other with some making direct reference to the idea of a community of practice. This mirrors Lave and Wenger's (1991, 121) idea of legitimate peripheral participation. This theme was also picked up by some of the longer-standing academic staff who commented that some learners went on to become employers (i.e. in Lave and Wenger's terms – moving centripetally towards becoming a full practitioner) who then went on to send newer employees through the same cycle, thus bringing them into the fold.

Overall the research has established that the pedagogical approaches used have had a positive impact on the learners in terms of their personal, professional and organisational contexts. Learners liked the way that the learning was delivered in a way that was relevant and accessible and were able to report directly positive impacts at work, and some of the descriptions were akin to Felstead *et al.*'s (2009) expansive environments. The employers were largely in favour of the process-driven model which enabled the learning to be directly linked to the needs of the workplace and the academic staff were either greatly supportive of the andragogical approach – or were keen to implement it where possible as they could see it would have clear advantages for these students over more traditional didactic teaching styles [see Moore Paradigm A (2007, 167)]. As a by-product of this research, academics found it extremely useful to discuss and share their ideas across traditional subject disciplines.

KNOWLEDGE

In a similar way to the discussion in relation to pedagogy, learners were not in a position to discuss Bernsteinian framing nor which mode of knowledge production was most relevant to them. Their feelings were mixed in relation to knowledge in terms of where it was held and whose knowledge held more value. Those who were relatively new to HE were less likely to feel confident that their knowledge was relevant where as those who were further into their study or were studying at higher levels seemed to appreciate the fact that their knowledge derived from experience at work was relevant and of use in their programme. Some alluded to the fact that they had never really considered the knowledge they held in their heads as useful whereas the academic staff were quick to realise the importance of capturing this tacit knowledge. Many mentioned how their increased confidence plus their greater knowledge combined to have a really positive impact at work.

The employers were appreciative of efforts made by the University to recognise their knowledge and to incorporate that into the programme. A new model of Higher Education appears to be emerging where the 'core' of the programme may be the employer's own training programme which they take to the university to provide some academic / theoretical 'underpinning'. This allows for Mode 1 and 2 (Gibbons *et al* 1994) to be brought together to provide a programme which is both occupationally relevant and academically robust.

Academic staff were very generous in their recognition of the expertise held by the learners and were keen to recognise and build this into programmes. There was a willingness for university staff to move outside the Mode 1 disciplinarity to more cross-cutting, Mode 2 approaches – e.g. Academic Schools working together across traditional boundaries, the setting up of special interest groups and increased partnership working with employers.

PARTNERSHIP / POLICY OF EMPLOYER-LED DEMAND

Partnership was a central theme which emerged from the data analysis of the interviews and focus groups with all three stakeholder groups. Learners felt that they were in partnership with their employers who were largely supporting them in their endeavours to reach the next level of academic qualification, either through practical measures such as time off for study / resources or through financial support (fee payment). They also welcomed the flexibility that the university showed in making the course fit around their working lives through responsive approaches to delivery and curriculum.

Employers were generally close to and knowledgeable about the programme development and delivery as a result of the close working relationships that they had with the university. The data showed that they generally had dual motivations in the sense of wishing to offer their employees an opportunity for self-development, while at the same time wanting to improve efficiency in their own organisations. One employer was required through government targets to get a certain proportion of staff qualified to at least level 4 and they really valued the approach to partnership working that the University took:

'The University has been fantastic... appreciate that they had come to the employer – to regional centres across (name of large rural county).

More difficult was finding a way to accurately measure the impact of the learning programmes on the workplace in terms of how organisation efficiencies had been implemented but all were certain that this had taken place and gave several examples of it. Some tensions were described but on the whole the views of employers were positive in relation to the way the university worked closely to meet their needs. However, an induction for the employers might be helpful in drawing their attention to some of the points raised by the learners, e.g. the importance of their support and especially how HE learning can negatively affect employee-manager relationships so that mechanisms can be put in place to avoid this.

Academic staff were largely positive about working in partnership with employers and learners. They talked about a new way of working which requires a different type of academic – more flexible and employer-facing - and how this was being encouraged by the university through promotions schemes which recognise and reward this kind of work.

While it was clearly challenging in some cases to be placed into this kind of academic context where the learners may be more knowledgeable about certain aspects, they largely welcomed this, especially where they were able to draw upon some of the pedagogic approaches mentioned above. Their main gripe was in relation to University records systems, which they felt were often unable to cope with programmes delivered outside the standard academic calendar and pattern. A key way of ensuring smooth delivery was for all parties to sign a learning partnership agreement which clearly set out roles and responsibilities.

TOWARDS A MODEL OF IMPACT EVALUATION – A CASE STUDY

The second part of this paper sets out to present a case study of an approach to evaluating a work based learning programme for middle and senior managers in a public sector organisation. The management development programme tendered for by the Business School was, from the outset a collaborative venture between the commissioning organisation (referred to as the organisation) and the learning provider (referred to as the

provider). The case study will detail the way in which the programme was developed using a training needs analysis process that ensured alignment with organisational strategy and that this, along with a range of other interventions in the design phase, enabled agreement with key stakeholders on the desired outcomes of the learning and the way in which individual learning and organisational benefits could be evaluated.

BACKGROUND TO CASE STUDY AND THE IMPORTANCE OF EVALUATION

In 2008, the organisation was faced with strategic change and a management population who, in the main, held their positions because of technical expertise. There had been little in the way of previous management development provision, and the organisation's rationale for commissioning the programme was to prepare the managers for their roles in the future organisation. It was particularly important that the managers were actively aware of the organisation's strategies and objectives and the identified group of managers (learners) were critical in engaging the wider workforce in support for change and maintaining morale during the transition period. It is increasingly recognised that the provision of learning and development can help to do this by having clear links between the learning intervention and organisational strategy. Felstead et al (1997) emphasise "moulding of attitudes and generating enthusiasm for corporate objectives."

The evaluation of learning can be described as a systematic process of collecting and analyzing information about a learning intervention which can be used for planning and guiding decision making as well as assessing the relevance, effectiveness and the impact of the various components (Raab et al 1991). In working closely with organisation's Head of HR, it was evident that the organisation placed importance on demonstrating value for money in terms of their investment in the programme. ASPC (2005) suggest that "evaluation is part of an accountable, professional and ethical public service." Therefore although evaluating learning is regarded as the least well conducted aspect of all training activities (Lewis and Thornhill 1994); it was clear from the outset that methods of evaluating the impact of the programme needed to be agreed prior to commencement.

It is clear from all the literature on learning and development that an effective (evaluation) system has to begin with a comprehensive training needs analysis process (Robson 2010). The evaluation approach used incorporates 3 phases. The first can be described as pre-programme, which essentially involves analysing the needs of the organisation and the individual learners as well as agreeing expectations of the stakeholders. The second phase (inter-programme) occurs during the delivery of the programme where learning is measured using a number of methods. The third phase is post programme, involving re-assessment for individual learners and identification of organisational benefits derived from the programme. Lewis and Thornhill (1994) are clear about the need to use an integrated model of evaluation which involves evaluation before and after the intervention as a more strategic approach.

Pre-Programme - Learning Needs Analysis

A range of methodologies were used to identify organisational priorities and learning needs. These included:

- 10 interviews with the senior team and 4 focus groups, (2 with senior managers and 2 with the target group of learners) – used to elicit the long term strategic needs of the organisation and the priorities, in terms of leadership behaviour for the management population.

- The formation of a project board with key stakeholders for the programme including representatives from the commissioning organisation and the provider organisation. This board reviewed the findings from the interviews and focus groups to agree learning priorities and has an on-going role in monitoring feedback, ensuring organisational ‘fit’, quality assurance and previewing content of all learning components.

It is clear from a range of papers that researchers have identified the importance of linking learning with organisations’ overall strategies and business objectives (Robson 2010). Completing the activities above gave those responsible for the learning provision a thorough understanding of the organisation’s strategies and objectives and also enabled an awareness of business priorities and expected learning outcomes with key stakeholders. Anderson Consulting argue that stakeholder expectations should be used to design and evaluate a course (Moad, 1995; Abernathy, 1999 in Tampkin et al 2002); whilst Goldswasser (2001) identified that there is a need to involve stakeholders in deciding what should be evaluated. By working collaboratively with the organisation, the provider was able to agree key evaluation measures. These measures were captured in the form of an organisation specific competency framework; subsequently validated by the management population via a managers’ conference activity.

The organisations project board determined that the programme would not be a ‘one-size fits all’ approach and that the programme offered options dependent on individual learning needs. Individual needs were therefore determined using a range of tools:

- The completion of a management psychometric assessment giving participating managers a ‘score’ in the effectiveness of their managerial decision making
- Attendance of all participating managers at a development centre which assessed their performance through a range of individual and group activities against the key measures (competencies) and provided each manager with verbal and written feedback on their strengths and areas for development
- The completion of a written learning agreement involving discussion between participating managers, their line manager and a facilitator. This was used to agree areas of strength and priorities for learning in the form of individual learning objectives to be periodically reviewed throughout the programme.

This approach, involving the learners’ line manager in the process of agreeing and monitoring learning is reinforced by the UK National Skills Task Force (NSTF, 2000,37) findings which state the crucial role of managers in determining the effectiveness of workplace learning.

This also provides a bench-mark and a starting point for each participant from which to monitor progress against specific targets; an approach recommended by previous research by APSC (2005). These objectives are expressed in behavioural terms as Robson (2010) discusses it is often appropriate to measure behaviours as well as looking at skills and knowledge.

Inter-Programme Evaluation

Throughout the delivery of the programme elements of Kirkpatrick’s model of evaluation (1977) have been incorporated. Despite its age, this model continues to be used in contemporary research (Schmidt et al, 2009 and Elliot et al, 2009 in Robson 2010). The way in which Kirkpatrick’s model is used is outlined below.

Stage 1 – Reaction	How do participants feel about the programme? To what extent are they ‘satisfied customers?’	Post learning questionnaires completed by participants after each module of learning; summarised for the organisation and the provider to gauge reaction.
Stage 2 - Learning	To what extent have participants learned the information and skills? To what extent have their attitudes changed?	This is reviewed and captured at action learning set meetings for all participants positioned between each module of learning.
Stage 3 - Behaviour	To what extent has their job behaviour changed as a result of attending the learning programme?	This is discussed and captured at the action learning meetings. It is also a requirement of the written assessments where learners are asked to discuss and evidence how they have applied and used their learning in the workplace. It is also discussed and captured during learners’ progress reviews with line managers.
Stage 4 - Results	To what extent have results been affected by the learning programme? (this may include sales, efficiencies, schedule being met, improvement in customer or employee satisfaction ratings, safety record, staff turnover or grievances)	This will be evidenced in the final projects that participants complete. Projects are agreed with the organisation and have to propose organisational benefits. Where possible, business benefit will be quantified.

Table 1: Application of Kirkpatrick’s (1977) model of evaluation

One of the main criticisms of Kirkpatrick’s model is that it fails to address the vital area of transferring knowledge into the workplace (Robson 2010). Chiaburu and Lindsay (2008, 199) comment: “training programmes are effective only to the extent that the skills and behaviours learned and practiced during instruction are actually transferred to the workplace.” To address this an inter-programme participant survey aimed at

capturing the extent to which learning has been applied and the influence of intervening factors identified by Holton et al (1999) in the Learning Transfer System Inventory, (Donovan et al 2001) such as the learners' motivation to learn, their motivation to transfer and use the knowledge and skills and the transfer conditions of the organisation.

Post Programme Evaluation

Whilst the programme has yet to reach its conclusion, measures are in place to evaluate the overall impact at an organisational and individual level. These include:

- Re-assess learners against the organisation's competency framework and review individual's achievement/non achievement of individual learning objectives agreed at the outset with line managers
- Re-assess learners using the same psychometric test to identify any improvement in scores for managerial decision making
- Organisational benefits gained from learners' projects to be highlighted via a show case event.
- Identification of individual learning from the programme from individual's reflective statements contained within their final project.

The importance of testing before and after the learning intervention is important as without this it is difficult to establish whether learners have learnt anything new (Dyer 1994). The use of a psychometric test allows for quantitative data to be used to illustrate any improvement in learners' decision making abilities. The involvement of the learners' line manager in a re-assessment against the organisation's competency framework is critical in providing on-going support for learning (Anderson 2009). Individual learners' projects will require details of organisational benefits; preferably in quantifiable terms (for example reduction in absenteeism rates, improved employee satisfaction ratings, cost savings, increased customer numbers) and will also include learners' reflective statements giving details of individual learning and personal development. A summary of the entire process is shown in Figure 1 below.

CONCLUSION

The first part of the paper gives the perspective of work-based learners, commissioning employers and academic staff involved in programme delivery. The key themes here relate to the importance of relevance, partnership and strong communication throughout the process and to the need to adapt pedagogic methodologies to meet the needs of the adult work-based learner.

The management development programme described in the case study has yet to be completed, and the results in terms of individual learning, application of learning and business benefit are still unknown. However, what this paper has endeavoured to illustrate, is that by designing a more comprehensive approach to individual and organisational needs analysis, measuring learner competence before, during and after the learning intervention, and identifying examples of learning transfer throughout the programme, it should be possible to generate some meaningful data to evaluate the impact of the programme at an individual and an organisational level. To assume a causal link between a learning intervention and outcomes in the form of individual and organisational performance is to over simplify matters. As Donovan et al (2001, 221) point out, "whether learning transfer takes place depends on many factors including employee motivation, relevance of training and, notably, the work environment." This means that it is essential learning

needs are assessed and outcomes evaluated as comprehensively as possible.

REFERENCES

- Anderson, V. (2009), *The Value of Learning*. London: CIPD.
- APSC (2005) *Evaluating learning and development: A framework for judging success*. Canberra. Australian Public Service Commission
- Chiaburu and Lindsay (2008) 'Can do or will do? The importance of self-efficacy and instrumentality for training transfer', *Human Resource Development International*, 11(2) pp.199-206.
- Donovan, P; Hannigan, K. and Crowe, D. (2001) 'The learning transfer system approach to estimating the benefits of training: Empirical evidence', *Journal of European Industrial Training*, 25(2), pp.221-228.
- Dyer, S. (1994) 'Kirkpatrick's Mirror', *Journal of European and Industrial Training*, 18(5), pp.31-32.
- Felstead, A., Fuller, A., Jewson, N. & Unwin, L. (2009) *Improving Working as Learning*. Abigdon, Oxon.: Routledge.
- Felstead, A., Green, F. & Mayhew, K. (1997) *Getting the measure of training a report on training statistics in Britain*. Leeds: Centre for Industrial Policy and Performance
- Field, J. (2006) *Lifelong Learning and the New Educational Order* New Revised edn. Stoke-on-Trent: Trentham Books
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. & Trow, M. (1994) *New Production of Knowledge: Dynamics of Science and Research in Contemporary Societies*. London: Sage
- Goldwasser, D. (2001) Beyond ROI. *Training* 38(1) pp.82
- Kirkpatrick, D.L. (1977) 'Evaluating training programs: Evidence vs proof', *Training and Development Journal*, pp.9-12.
- Lave, J. & Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Lewis, P. and Thornhill, A. (1994) "The evaluation of training: An Organizational Approach." *Journal of European Industrial Training*, 18(8), pp. 25-33.
- Merrill, B. (1999) *Gender, Change and Identity: Mature Women Students in Universities*. Aldershot: Ashgate.
- Moore, L. (2007) 'Ethical and Organisational Tensions for Work-based Learners', *Journal of Workplace Learning*, 19 (3), pp. 161-172.
- NSTF (2000) *Third Report of the National Skill Taskforce: Upskilling adults and the role of workplace learning* London DfEE:
- Nixon, I., Penn, D. & Shewell, J. (2006) *Workplace learning in the North East*. Higher Education Funding Council for England [Online]. Available at: http://www.hefce.ac.uk/pubs/rereports/2006/rd12_06/rd12_06.pdf (Accessed: 5th May 2011).
- Quality Assurance Agency (2001) *The Framework for Higher Education Qualifications*. [Online]. Available at: <http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp> (Accessed: 5th May 2011).
- Raab, R.T; Swanson, B.E; Wentling, T.L., and Dark, C.D. (Eds.). (1991). *A trainer's guide to evaluation*. Rome: FAO.
- Robson, F (2010) *Training Evaluation: A Literature Review* unpublished
- Tamkin, P. Yarnell, J. Kerrin, M (2002) *Kirkpatrick and Beyond: A review of models of training evaluation*, Brighton: Institute of Employment Studies.

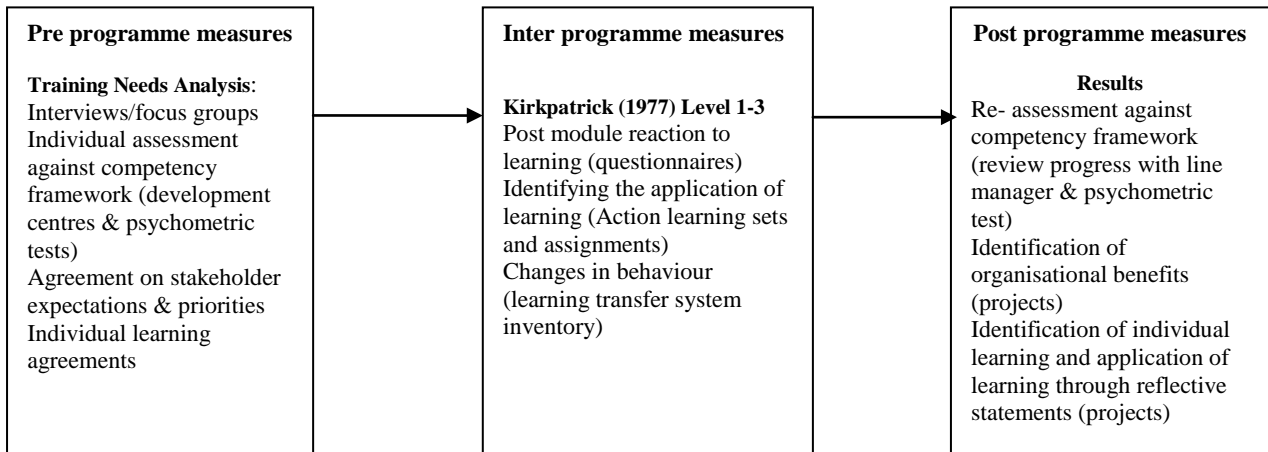


Figure 1: Summary of evaluation methods