
Training Partnership: is it a Life-Long Learning Partnership and Who Benefits?

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This paper outlines a partnership between employer, employee and college to produce home-grown non-technical line managers. The managers will be given training to enable them to attain an effective level of plant specific technical awareness, and proficiency in quality and leadership.

INTRODUCTION

Over the last several years, the focus for industrial change has been around *lean manufacturing*, the whole philosophy being that of minimal staffing of companies, both hierarchically and horizontally [1]. This has obvious benefits for productivity and for cost management. However, implicit in this is the fact that staff at all levels in the organisation must become more flexible, if not multi-skilled, so in essence the equation now reads *fewer people, better trained equals higher productivity and cost-effectiveness*. The idea that employers can always recruit the skills they need is a very tenuous one however. During the last five years it has become very apparent that no matter how highly skilled an employee may be from a previous job, specific training will again be required if he/she is to fit into the new flexible role expected of him/her in the new, lean organisation.

This however leaves companies in the classic Catch 22 situation. Because of the decreasing number of employees and the greater demands on the ones that are in the organisation, the ability to release people for training becomes increasingly difficult.

One of the partnership developments between University of Wales Institute (UWIC) and Robert Bosch is the training of staff who wish to be promoted to a managerial role on one of the production lines within the company. Such staff will generally be non-technical and the employer has decided that they will be trained in the following areas:

- Technical (plant specific, eg PLCs and Fluid power)
- Quality
- Leadership

The opportunity to undergo this training is open to everyone on-site.

The delivery of the training must be flexible and must not affect the working patterns. The course fees are paid by Robert Bosch. Each individual course member is neither given time off work nor guaranteed a promotion upon successful completion of the training.

A FLEXIBLE DELIVERY STRATEGY

As indicated earlier a key objective of the training partnership between Robert Bosch and UWIC is to increase the participation of employees in a variety of programmes. Key criteria for the successes of these programmes are:

- that the employees have some choice in the order of study and units most appropriate to their own circumstances;
- that the employees can attend their chosen course of study with little or no disruption to their working patterns;
- that the programmes themselves are dynamic enough to be able to respond to changes in technology and changes in company practice.

A course delivery strategy was developed to meet the above criteria. The strategy was developed in accord with the *capability* approach adopted by other

programmes at UWIC [2]. The principle features of the strategy developed for the programme are:

- A series of introductory presentations made to all employees at the beginning of the academic year.
- Introductory counselling sessions for individual employees.
- A highly flexible timetable of lectures, study and laboratory periods.
- Fully documented learning material for all students.
- Extended programme time scales.
- On-site teaching and laboratory accommodation.
- A regular and formal pattern of course review meetings.

The introductory presentations are given on a *rolling* cycle over a period of three weeks and are designed to outline the available programmes of studies to all employees. These presentations, together with the counselling sessions, provide employees with the opportunity to examine the programmes on offer and, with specialist advice from teachers and Bosch training managers, select the programme most appropriate to their needs.

In order to allow employees to realise their chosen study pattern without disturbing their normal work patterns, the course is designed to be delivered with maximum flexibility. This involves dividing each programme into self-contained modules, each consisting of one key lecture followed by four student-centred study sessions. A number of study sessions are provided on different mornings, afternoons and evenings throughout the week. Sessions are also offered on Saturday mornings (a rare provision in the UK). Employees are free to choose those sessions which best fit their current work commitments. Each key lecture is delivered twice, once during the day and once during an evening of the following week.

Each programme is fully documented and students receive a workbook for each programme module. The workbook consists of lecture notes, tutorials and laboratory exercises and allows the students to pursue their studies at a rate, and in a manner, which most fits their needs.

Recognising that Bosch employees would not be undertaking this programme in the traditional *day release* attendance pattern, the programme is delivered over an extended time scale. This allows them to take one or more years to complete their qualifications.

Bosch and UWIC also collaborated in setting up an on-site Training Centre to support this and other programmes. The Centre has been equipped with electronics laboratories and computing facilities which

match those provided at UWIC. The Training Centre is manned by UWIC staff at designated times and is available to all employees on an open-access basis. The Training Centre can thus provide on-site support for the student-centred sessions within each programme module. Employees thus benefit from access to such facilities close to their place of work (rather than having to travel to UWIC).

In order to produce programmes that are sufficiently dynamic to changing circumstances within the company, course review meetings are held regularly. These review meetings involve company training executives, teachers and representatives of the students. All current students are also consulted individually before each review meeting. Such meetings provide valuable opportunities for the operation of the programmes to be reviewed, problems to be raised and resolved, and plans made for future programmes. Review meetings can also consider programme content and prepare proposals for change and/or updates to programmes.

THE PROBLEMS ENCOUNTERED

The principle problems encountered over the past three years have related to the fact that employees have had to fit their training around their normal work commitments. This has led to difficulties in prioritising, particularly at times of heavy work demands or changes in shift arrangements. For example, employees can sometimes miss key lectures and/or study sessions through being committed to undertaking overtime work. The flexible time tabling and delivery strategy has been able to cope with such problems up to a point but inevitably there are occasions when the individual study programmes are significantly disrupted, particularly through extended overtime work.

The net outcome of the above difficulties has been that these programmes have suffered a dropout rate higher than is normally the case for more traditional *day release* type programmes.

Thus, although the training programmes have encouraged increased student participation, there has been a cost in terms of the number of participants whose enthusiasm had initially been engaged but who have subsequently failed to achieve their goals.

WHO BENEFITS?

The company could now have a highly trained and efficient workforce with no obligation to provide promotional opportunities. The following are just a few points for consideration, neither attempting to pose nor answer all the questions that may arise:

- The staff trained will have attained a national qualification and may now leave the company for pastures new.
- Is the training really life-long learning? From the employer's perspective are the skills gained transferable within the company?
- Is the training life-long? From the employees perspectives are the skills gained transferable outside the company?

Therefore who wins and who loses? Is it the employee? Is it the employer? Or do both?

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1. Womack, J.P., *The Machine that Changed the World*. New York: Rawson Associates (1990).
2. Stephenson, J. and Weil, S., *Quality in Learning: A Capability in Higher Education*. London: Kogan Page (1992).

BIOGRAPHIES



David Michael Holifield BSc (Hons), CEng, MIEE, PGCE (FE) is a Senior Lecturer in the School of Product and Engineering Design, University of Wales Institute, Cardiff; Course Director of part-time courses; and Industrial Liaison Officer.

As Course Director and Industrial Liaison Officer,

Mr Holifield sets up short course training and mainstream education for various companies to fit their needs, ie training needs analysis. He also develops strategies for the long-term needs of companies, marries company training to nationally recognised qualifications, and subsequently manages these programmes of study.

His career began in industry at the age of sixteen as an apprentice electrician for British Steel; he progressed to become an electrician, then junior engineer and finally an engineer. He was a research associate for three years and undertook research into pulse magnetisation of amorphous ribbons for MoD at UCC. He has produced several publications/presentations about training and education within and for industry.



Nigel Thomas RBGB-CF/PER is a Training and Development Executive at Robert Bosch Ltd, where he has held the position for the past nine years. In that time he has created a unique training environment within the company, where he has formed highly successful, long-standing relationships with many local educational bodies, including UWIC and the University of Glamorgan. 20% of the Bosch workforce is currently working towards a nationally recognised qualification, sponsored by the company, but working in their own time.

His career background is not typical of a training manager. After leaving school he undertook a traineeship as a metallurgist with British Aluminium Company before joining TRW Cam Gears, where he stayed for eighteen years. His career at TRW started on the shop floor, moving through quality, into management and was then seconded to the training department, where he became hooked. He was instrumental in introducing quality circles into TRW and then was part of the team that introduced JIT and cellular manufacturing as part of a major organisational change.

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