Abstract: This paper draws on a recent research project into high-level key skills links between HE and employment. The project has worked with groups in several universities and companies to explore how the developmental model embedded in the QCA key skills national standards can be used to support learning and assessment of higher level (QCA levels 4 and 5) key skills.

Employers increasingly value skills such as teamworking, communicating effectively with partners and customers, and being able to adapt to new situations and develop new capabilities. Within organisations individuals may be expected to move from project to project and job to job. They may be expected to identify their own particular training needs, work within the company business goals and develop their own individual skills portfolio to satisfy professional recognition requirements. HE currently appears to offer relatively little support or training to develop the key skills needed in such environments.

As part of the project students in HE have used a framework of planning, monitoring progress, presenting outcomes and reviewing progress to develop their skills. The model encourages learners to recognise and articulate their own capabilities more clearly, and offers an assessment structure for profiling achievement. It is this 'meta-skills' approach that is used to bridge the gap between HE and employment by encouraging learners to be actively aware of the context in which they are currently situated, and to make connections with experience, skills and knowledge they have gained elsewhere.

The paper presents some preliminary findings and comments from the project.

Keywords: key skills, higher education, learning, employment, assessment
INTRODUCTION

This paper draws on work carried out as part of an HEFCE Innovations project: *Key Skills: Making Connections between HE and Employment*. The project, run from the Centre of Outcomes-Based Education at the Open University, is working with partners in a number of universities, companies and professional bodies to explore how the developmental model embedded in the QCA key skills national standards at the higher levels (levels 4 and 5) can be used to support skills development and assessment. As part of the *Making Connections* project four groups of students at different universities were encouraged to use the higher level skills to support their learning on a range of undergraduate programmes including engineering, history, nursing, business studies, and on a doctoral programme in astrophysics.

A critical step for the new graduate is the move from a formal to an informal learning environment. Cheetham and Chivers (2001) point to the importance of informal learning in their model of professional formation, and suggest that 'much of the learning required to achieve professional competence actually takes place after the completion of formal training'. An important skill for the graduate, therefore, is to be able to function as a 'learning acquisitor' and be able to see a wide range of different situations as offering opportunities for learning.

Skills development is more than just accumulating competencies. The higher-level model focuses on raising learners' awareness of their own capabilities to understand better how these match the tasks that they want to tackle. The emphasis is on learners being able to identify, analyse, develop and articulate what they need to do to improve their performance in a chosen area. It is this 'meta-skills' approach that is used to bridge the gap between HE and employment by encouraging learners to be actively aware of the context in which they are currently situated, and to make connections with experience, skills and knowledge they have gained elsewhere. Making connections means identifying 'what counts' in a particular context (for example, what counts as an acceptable essay, report, presentation or problem solution), recognising what skills and knowledge, if any, can be brought to bear from previous experience, moving forward by monitoring progress and gaining new skills and knowledge as appropriate, and finally actively reflecting on and learning from the experience.

In the workplace new graduates expecting to apply directly their HE skills and knowledge may instead find themselves in a more fluid environment in which they are expected to learn new skills quickly and informally, contribute effectively to team projects, and to actively seek out sources of feedback and support to tackle new problems. However, although there is an increasing interest in skills development in HE (Fallows and Steven, 2000) the project work has shown that the skills needed in the workplace are often not well recognised, understood or developed in conventional HE courses. More to the point, HE appears
to offer little in the way of scaffolding or support to help students transfer skills out of the university and into the workplace, a point reinforced by Bennett et al. (2000). Students can leave HE without awareness of what they can do and without a framework to consciously develop their skills further.

A FRAMEWORK FOR LEARNING

The higher level key skills explored in this project are referenced to the key skills national standards. These standards have been developed by the Qualifications and Curriculum Authority (QCA, 2000) and are organised into five levels of achievement. Levels 1 and 2 focus on the development of basic skills and are intended to build confidence in applying skills to largely routine situations. Level 3 marks a shift from being able to tackle straightforward tasks to being able to deal with more complex situations, and level 4 indicates the standards students should be aiming to achieve towards the end of their undergraduate studies. Level 5 is aimed at an individual’s continuing personal and professional development and is relevant to postgraduate work and the requirements of professional bodies.

At the higher levels (levels 4 and 5) a common framework for learning and skills development becomes explicit. The defining components of this framework are:

- **Developing a strategy**: identifying current capabilities and setting targets to improve skills in specific areas; devising strategies and identifying resources and feedback to develop skills.

- **Monitoring progress**: implementing the strategy for improvement, managing time effectively, monitoring and critically reflecting on progress, adapting the strategy to overcome difficulties.

- **Presenting results**: being able to select and reflect on evidence to demonstrate skills, understanding requirements of audience and presenting work appropriately, being able to articulate knowledge and skills clearly to others.

- **Evaluating strategy**: evaluating overall skills development and the effectiveness of the strategy for improvement, identifying strengths and weaknesses of the approach, and ways to move forward and further improve.

As with all learning skills development rarely follows such a neat linear process. Real students are likely to move backwards and forwards within this framework, revisiting some areas and adapting the approach to suit their own situation. However, the process seeks to encourage in the student a greater understanding of their own learning styles (that is, what does and does not work for them in tackling new learning
situations), and to offer a ‘skills language’ they can use to identify and articulate their abilities and needs clearly to themselves and others.

To make connections between academic and vocational work we need to focus on learning outcomes that relate as much to process as to content. Indeed, the main demands for training and professional development that we have identified from the workplace were in the areas loosely described as ‘soft’ or interpersonal skills at all levels. These are not easily measurable or linked directly to courses or programmes.

A FRAMEWORK FOR ASSESSMENT

Key skills assessment has often focused on those aspects that are relatively easy to assess, such as specific IT techniques (for example, using word processors or spreadsheets), or presentation skills. However the essence of higher-level key skills development lies in being able to use skills to take an active role in learning. Our work on assessment has focused on the design and development of assessment strategies and instruments that assess high-level skills sensitively as part of the learning process. This is not a straightforward task: the critical factor is to make sure that the assessment process itself does not distort or disrupt the key skills development work but actively supports learning.

We have found the following approaches useful in designing assessment strategies:

- using problem-solving approaches to learning where learners are encouraged to tackle different tasks in a systematic way, making conscious links between work they have completed previously and the new or different task;

- encouraging learners to monitor and reflect on the way they learn and the quality of their performance, and to practise these skills systematically;

- developing a climate where individuals challenge their own ideas and development through dialogue, monitoring and reflection;

- allowing and actively encouraging individuals to ‘bridge’ across contexts thus explicitly connecting their learning and experience.

Equally important in the design is the method of assessment. Formal tests and examinations are unlikely to be appropriate methods of assessment for these types of skills (Biggs, 1999). There are also the requirements for cost effectiveness, consistency and rigour that go with providing qualifications and credit. We are currently experimenting with two methods of assessment: the selective portfolio and the professional dialogue. The selective portfolio is designed to encourage
the individual to focus specifically on providing evidence to show the processes of their learning through the presentation of particular outcomes. Professional dialogue has been used in the workplace and for the QCA level 5 key skill to provide opportunities for the individual to actively use and illustrate their skills in a professional conversation. Both methods are currently being evaluated.

PRELIMINARY RESULTS

Early evaluation and analysis indicates:

- students can use the learning framework systematically to help them develop the meta-skills of planning strategically, monitoring progress and evaluating performance;
- using the framework students actively ‘bridge’ across contexts from HE to the workplace, and are motivated to do so;
- development of meta-skills takes time and requires active support, but students can use framework documents and guidance to help them;
- assessment of such skills is demanding for both the student and the assessor but student reports indicate clear learning benefits;
- progression strands can be identified to actively support student development;
- courses and programmes in HE and the workplace show little evidence of assessment of these skills;
- both HE and the workplace needs to address issues of consistency of assessment and recognition of skills development, and acknowledge the importance of these aspects for personal and professional development.

SUMMARY

The project work has emphasised the role and place of high-level key skills development as a central part of learning both in an academic context and in the workplace. From the individual’s perspective these activities are often viewed differently. In HE learning is something that is expected as part of a course. In the workplace the expectation is frequently one of contributing to particular tasks and project work, with relatively few formal learning opportunities. Although the importance and relevance of key skills is tacitly acknowledged in both contexts there is often less explicit recognition by individuals and a lack of awareness of what skills development might mean at higher levels. Within HE there seems currently little to help students develop strategies for skills development that can support learning across
contexts and few opportunities for assessment and recognition of their skills.

There is no short cut to skills development. But if we are serious about equipping individuals to deal with the complexities of the workplace we need to offer new strategies that help learners make connections between the requirements and expectations of the university and those of the employer.

REFERENCES


