



Context is key, says NFER's review of technical education

By Tami McCrone

A recent National Foundation for Educational Research report highlights what technical and vocational education should look like and how it can be understood and applied

The importance of technical and vocational education has been the subject of much recent commentary. Bodies such as the Organisation for Economic Cooperation and Development (OECD) and the Association of Colleges (AoC) have long called for improvements in these important areas of education and training, citing fears that to neglect them would place Britain's productivity and competitiveness at risk globally.

But what technical education should look like has been open to debate. To date, there has been little research on what form it should take and there has been a tendency to define it within the context of vocational learning, rather than as a distinct entity.

The National Foundation for Educational Research (NFER) report *A Review of Technical Education*, published at the end of 2015, examines what makes good learning and teaching in this area, and highlights a number of key points.

Good vocational and technical education, the report said, shares key characteristics with other forms of quality teaching and learning. It needs to encompass, among other things, purposeful and stimulating learning; a culture of aspiration and achievement; an environment conducive to learning; appropriate learning support; and interactive approaches to teaching.

And, in addition to being open to innovative approaches, teachers also need strong subject knowledge and confidence in their ability to impart this to learners.

However, what was absolutely key was the importance of contextualising the learning and teaching in the selected area of work or occupation on which the course concentrates.

This means the course content and the teaching approaches need to support the recontextualisation of learning for the learner in their chosen field of work.

The literature also suggested that vocational and technical learning requires sequencing of learning to enable learners to process information more easily. Learners benefited most from being taught by people who combined professional with pedagogical expertise in an industry-standard setting.

With this in mind, the NFER has developed a model, presented in the form of a layered, or 'onion', diagram (see link to report below), to show how technical teaching and learning can be better understood and applied.

At the core of the layers is the learner as the primary recipient and beneficiary of teaching and learning. The next ring shows the characteristics and traits of good quality learning in general, which are acquired during students' secondary education to ensure progression to more specialised technical or vocational learning later. This includes a personalised and flexible approach to study, using innovative approaches; establishing a good rapport between learner and teacher and a purposeful and stimulating environment.

The outer layer represents the characteristics of technical and vocational education specifically, and outlines aspects such as meeting the diverse needs of learners; access to industry-standard facilities and resources; contextualisation; sequencing of learning; communities of practice; and employer engagement. Learners should be able to see how their studies have an impact on the development of skills for the workplace and distinguish clear pathways towards higher-level learning.

The report concludes that further education colleges, as one of the main providers of technical education, are best-placed to take its development forward.

To achieve this, they say, the AoC could audit its members to find out how much

capacity and capability there is to deliver technical education at Levels 3, 4 and 5, and to undertake to share good practice in this area.

The organisation should also lead discussions on the continuous professional development of staff so they have up-to-date knowledge and skills in their specific areas.

The report says: "It is crucially important that teachers/trainers and/or institutions have time to build and maintain on-going relationships with employers and sector bodies. This enables teachers and trainers to be part of a community of practice where pedagogy fits with workplace practices."

Furthermore, there is a need to develop a more detailed understanding of technical education teaching and learning to help the further education sector to "meet the growing technical education challenge".

• *The Association of Colleges commissioned the National Foundation for Educational Research (NFER) to undertake a rapid literature review in order to identify the key characteristics and essential elements of teaching and learning in technical and vocational education. This small-scale review was carried out between July and September 2015.*

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The full report is available at www.nfer.ac.uk/publications/AOCT01/AOCT01_home.cfm

