
What if the further education and skills sector realised the full potential of vocational pedagogy?

Bill Lucas

In all the recent government documents about vocational education my favourite quotation is: “Learners must demand high quality pedagogy which will necessitate that stronger links are built between employers, teachers and teaching”.¹ I imagine thousands of apprentices rising up from their labours to march on the Department for Business, Innovation & Skills in London shouting “Pedagogy! We want better pedagogy!”

In your dreams! For in the UK, despite my and my colleagues’ best endeavours,² ‘pedagogy’³ is a word that is rarely used by those working in further education (FE) and skills. Instead conversation all too easily turns to funding formulae, new kinds of institutions, reformed qualification systems, different apprenticeship specifications and the like. All of these have value but none is as essential as the high quality teaching and learning methods which sit at the heart of all excellent vocational education. For it is pedagogy which is the beating heart of the vocational body politic.

Let’s dream on a while.

Of course before we can think about vocational pedagogy we have to think hard about what we want it for, what outcomes we desire. It is here that many thinkers about vocational education fall down. For vocational education can too easily be defined as if it is essentially about the acquisition of the competences or skills wanted by employers. Such a definition is too narrow and too unambitious. Whether we are talking about apprenticeships or vocational

1. BIS (2014) *Skills Funding Statement 2013-2016*. London: Department for Business, Innovation & Skills.

2. For example - Lucas, B., Claxton, G. and Spencer, E. (2012) *How to teach vocational education: a theory of vocational pedagogy*. London: City & Guilds.

3. Vocational pedagogy is the science, art, craft and gumption of teaching for employment and for employability. Pedagogy also fundamentally includes the decisions which are taken in the creation of the broader learning culture in which the teaching takes place and the values which inform all interactions.

education more broadly we need to think big about what our desired outcomes are. There are, I believe six:

1. Routine expertise – a set of necessary skills developed through practice in a range of familiar settings and honed through feedback.
2. Resourcefulness – being able to deal with the unexpected, the non-routine; something that can be cultivated through practice in a range of contexts, by simulation and role play and through contact with many others
3. Craftsmanship – an ethic of excellence, a sense of pride in a job well done, acquired through mentoring by outstanding role models and supported via cultures in which it is never acceptable to do work that is second best
4. Functional literacies – numeracy, literacy, information and communications technology (ICT) and graphical capability, often requiring the expertise of many others in any workplace or skills setting.
5. Business-like attitudes – a recognition that someone is paying for the product or service and all of the attendant skills of self-presentation and self-organisation to deliver these in a timely and respectful way.
6. Wider skills for growth – all those invaluable and soft and non-cognitive skills – self-belief, empathy, self-control, perseverance, collaboration and creativity, acquired by developing strategies and tactics in the context of learning in colleges, with training providers or workplaces.

All too often we focus on the first and the fourth of these and omit the rest. Vocational education is consequently diminished, a poor second to general education. But if we can agree on a set of unambiguously aspirational outcomes then we start to ask and answer some better questions which will, in turn, enable us to select the teaching and learning methods which are likely to work best.

I am not alone in making this kind of case. In different contexts and over a number of years arguments for one or more of these six outcomes have been made by many researchers including Guy Claxton,⁴ Alison Fuller and Lorna Unwin,⁵ Angela Duckworth and Martin Seligman,⁶ Ron Berger,⁷ David Perkins⁸ and Lois Hetland.⁹

We need to ask about the nature of the work being prepared for, about the age and experience of the learners and about the demands of any specific courses or qualifications. We need to understand the contexts for learning, the spaces and resources available and the levels of teaching experience and capability on hand.

4. Claxton, G. (2013) *School as an Epistemic Apprenticeship: The Case of Building Learning Power*. London: British Psychological Society.

5. Fuller, A. and Unwin, L. (2008) *Towards Expansive Apprenticeships: A commentary by the teaching and learning research programme*. London: TLRP/ESRC.

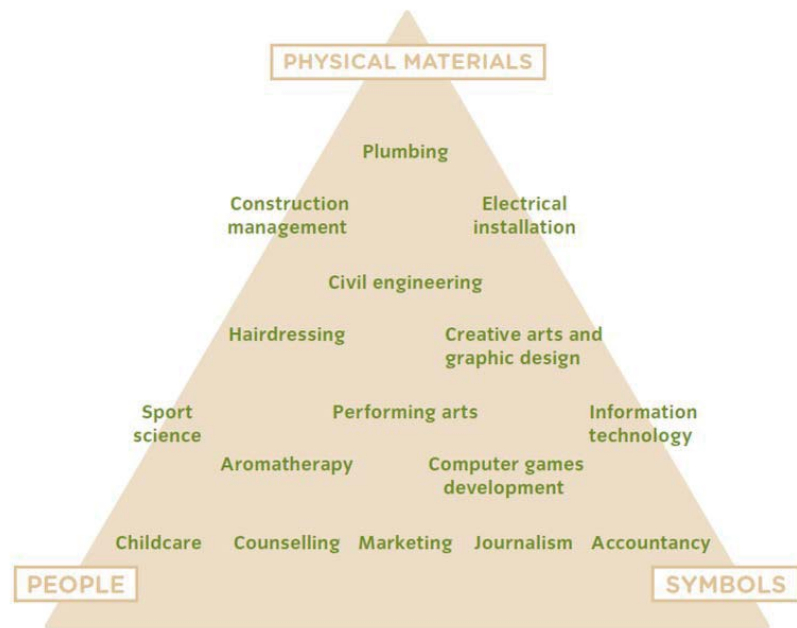
6. Duckworth, A. and Seligman, M. (2005) Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, 16(12), pp.939-944

7. Berger, R. (2003) *An Ethic of Excellence: Building a culture of craftsmanship with students*. Portsmouth, NH: Heinemann Educational Books.

8. Perkins, D. (2009) *Making Learning Whole: How seven principles of teaching can transform education*. San Francisco: Jossey-Bass.

9. Hetland, L., Winner, E., Veenema, S. and Sheridan, K. (2007) *Studio Thinking: The real benefits of visual arts education*: New York: Teachers College Press.

Let's look at just one of these variables, the nature of the work and the 'materials' it requires. At the Centre for Real-World Learning my colleagues and I suggest that, broadly speaking, people work with physical materials (like a plumber and pliers or boilers), with people (like someone undertaking childcare dealing with children and their parents) or with symbols (like an accountant manipulating numbers)¹⁰. In many cases we are working simultaneously across all three. Engineers are a good example of this.



I am not seeking to make an overly precise distinction between different materials just pointing out that, with vocational education, it helps to understand these things at a more granular level. So, in terms of learning to work with physical materials, expert instruction with feedback, imitation, and trial-and-error will be useful methods. When working with, for example, elderly people in a care home the notion of trial and error is not so smart; role play, simulation and close observation may be more useful. And when dealing with symbols – words, numbers and images – spread sheets, virtual environments and worked examples may unlock the learning.

Assuming similarly careful scrutiny has been undertaken of learners, teachers and context, then a veritable cornucopia of possible teaching and learning methods present themselves. Here I have grouped them into nine broad categories:¹¹

1. Learning from experts – By watching and imitating and by listening, transcribing and remembering.
2. Practising – Through trial and error, experimentation or discovery and deliberate practice.

10. The figure is taken from Lucas, B., Claxton, G. and Spencer, E. (2012) op cit, p.36.

11. Here I am drawing from Lucas, B. and Hanson, J. (2015) *Remaking Apprenticeships: powerful learning for work and life*. London: City & Guilds.

3. Hands-on – By making, by modelling, by drafting and by sketching
4. Feedback for learning – Using assessment for learning approaches, through conversation, by reflecting and by teaching and helping others
5. One-to-one – By being coached and by being mentored and by helping others.
6. Real-world learning – By real-world problem solving, through personal or collaborative enquiry and by thinking critically and producing knowledge
7. Against the clock – By competing, through simulation and role play and through games.
8. Online – Through virtual environments and, seamlessly, blending virtual with face to face.
9. Anytime – On the fly, making use of the unexpected.¹²

If the UK realised the full potential of vocational pedagogy, then all those who teach – advisers, coaches, guides, instructors, lecturers, mentors, trainers, tutors, and so on – would be able to select the best blend of methods, matched for specific learners in the specific contexts in which they found themselves. In turn, this would help develop learners/workers who were skilled, resourceful, craftsmanlike, literate and numerate, customer-oriented and highly capable individuals.

The world would be our vocational oyster and there would be many beneficial outcomes. Here I express this line of thought as a theory of change, working backwards from the idea of being a global leader in vocational pedagogy.¹³

If:

- We are more ambitious about what we want vocational education to achieve.
- Teachers are better able to select learning methods which will achieve our desired outcomes.

Then:

- More students in vocational education will achieve better outcomes.
- More students will make FE a destination of choice, sometimes progressing through it to HE.
- The esteem with which vocational education and the FE and skills sector is held will rise dramatically.

So that:

- Both business competitiveness and social mobility will be enhanced.
- Learners will be more capable, more employable and better citizens.

12. It is not possible here to do justice to the wealth of scholarship which exists regarding each of these nine groups of methods but the references in our report (2012) into vocational pedagogy will enable readers to find out more

13. See, for example, Center for Theory of Change at: <http://www.theoryofchange.org>

So that:

- More teachers want to work in the sector. The sector becomes, better funded.
- More and thriving research centres in FE and skills will be created to share best practices.

So that:

- The UK truly is a global leader in vocational pedagogy.

Many will want to say:

- But what about funding?
- And examinations?
- And Ofsted?
- And organisational structures?
- And parity of esteem between ‘vocational’ and ‘academic’ education?

To which I reply that these have indeed been the kinds of questions we have been grappling with a long while. But in this flight of possibility thinking it is vocational pedagogy on which I have chosen to focus as an under-recognised force for change.

Of course it's too late to leave this kind of thinking to choices made ages 14 to 19 at school or college or even to skilled curriculum designers in the FE and skills sector. We need to start in primary education with an explicit list of capabilities as well as the subjects which make up any curriculum. In this way as well as developing good spellers we can boost children's perseverance at the same time. Or, while learning about the Tudors we can be cultivating empathy for the many ordinary people who did not live in palaces.

Pedagogy for the cultivation of capabilities and character needs to be explicit and embedded in the teaching of individual subjects. Guy Claxton and I have written extensively about how this might be achieved.¹⁴ Most recently in *Educating Ruby: what our children really need to learn*,¹⁵ we suggest that there are seven core capabilities which every child needs to learn that will form the bedrock of their life as a powerful learner. They are confidence, curiosity, collaboration, communication, creativity, commitment and craftsmanship. Our 7Cs are so named for ease of remembering. But each can trace its roots to a strong research basis and for each I could take you to promising practices in schools and colleges.

Do educators, politicians and researchers in the UK really see the power of vocational pedagogy today? Only in my dreams to date. But I can see just how we might work together to bring it about and it will not be a moment too soon.

14. See, for example, Claxton, G., Chambers, M., Powell, G. and Lucas, B. (2012) *The Learning Powered School*. Bristol: TLO Ltd; and Claxton, G. and Lucas, B. (2013) *What kind of teaching for what kind of learning?* London: SSAT.

15. Claxton, G. and Lucas, B. (2015) *Educating Ruby: what our children really need to learn*. Carmarthen: Crown House Publishing. [online] Available at: <http://www.educatingruby.org/>