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Learning styles: time to move on

Frank Coffield

Opinion piece

Resource

Learning styles: time to move on

Frank Coffield, Emeritus Professor of Education
at the Institute of Education

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Whatever your views on Ofsted – and mine are unequivocal that the money governments devote each year to this organisation would be far better spent on staff development for teachers within a rigorous system of peer review – I have to admit that the recent changes it has made to inspection have at last turned teaching and learning (henceforth T&L) into the number one priority for schools and colleges. For someone like myself who used just suppose teaching and learning became the first priority... as the title of a publication in 2008, such a change should have sounded like Mozart to my ears, but I have reservations, as I shall explain (Coffield, 2008).

All teachers, from the newest entrant to aspiring heads and principals, are acutely aware that, from now on, no school will be judged 'outstanding' unless T&L in that school are considered outstanding. A further innovation is that the leadership of T&L will now be evaluated by Ofsted, whose new chief considers that such leadership consists of four features: a passion for T&L; a commitment to high-quality professional development; the effective monitoring of T&L; and robust performance management (Wilshaw, 2012).

I'd like to suggest that **the** most essential feature missing from that list is a solid, extensive and constantly updated base of knowledge about T&L on which to build a culture of learning in every school. The new demand that headteachers and principals should be not only responsible for the financially sound running of their institutions but also inspirational educational leaders will require them to be (or become) experts in T&L. Senior leaders will have to be comfortable, for example, about being asked what their theory (or theories) of learning is (are), and how they use it (them) to evaluate and improve their practice and that of their colleagues. To be more specific, they will need to have considered views, informed by up-to-date evidence, on current debates and controversies within T&L, for example, what interventions have been shown to have the biggest impact on students' learning? How can we most efficiently introduce change into complex social institutions like schools? Are synthetic phonics the best way to teach children to read? Is dyslexia just a label used by pushy parents to get their children extra help, or a genuine learning disability? How effective is the teaching of emotional intelligence or thinking skills? How do we get students at all levels of ability to become better at learning? And, to come finally to the topic of learning styles, are they more of a hindrance than a help?¹

Evidence on learning styles

I have been studying the research literature on learning styles since 2003 and have written up my findings in a series of publications aimed at practitioners (Coffield, 2004a, 2005, 2012) and academics (Coffield, 2004b, 2012). The four most important limitations of the learning styles approach can be stated very briefly here, but readers who want access to the detailed evidence and arguments are referred to the full reports.

First, the literature on learning styles is theoretically incoherent and conceptually confused; for example, endless overlapping and poorly defined dichotomies such as 'verbal' v 'auditory' learners; 'globalists' v 'analysts'; and 'left brainers' v 'right brainers', for which there is no scientific justification. I counted 29 such confusing dichotomies in the literature and they are listed in Coffield (2012).

Second, not all learning styles questionnaires are alike: some are better than others. That said, of all the 13 most popular models that we examined in detail, only 1 met the 4 minimal standards for a psychological test and it was designed for use, not in education, but in business.

Third, the questions posed in learning styles tests are devoid of any particular context, as though learning was a free-floating skill that is independent of the subject or problem being studied. It is not possible, for instance, to learn to become a hairdresser or a plumber by using the same learning style. In plumbing it is usual for an apprentice to learn by trial and error how to bend a copper pipe with a blowtorch, but that kinaesthetic approach is likely to lead to some seriously singed heads in the salon.

¹ There is a vibrant research literature on all these topics and a useful introduction to these controversies and many others can be found in Adey & Dillon (2012).

Interestingly, the German-speaking educational world has rejected the notion of learning styles because its strong pedagogical tradition objects fundamentally to the notion of styles of teaching and learning that are generalised and divorced from content and context. The learning styles movement has unwittingly led to a devaluing of knowledge, and Stephen Johnson, in his searching critique of thinking skills, has argued that 'appropriate, detailed, subject-specific knowledge renders thinking skills redundant' (2010:27). I would contend that the same applies to learning styles.

Fourth, to answer the question that is of most interest to practising teachers, I found no hard evidence that students' learning is enhanced by teaching tailored to their learning style. A comprehensive American study concluded in 2009 as follows:

there is no adequate evidence base to justify incorporating learning styles assessments into general educational practice... limited education resources would better be devoted to adopting other educational practices that have a strong evidence base

Pashler et al, 2009:105

And there are plenty of such practices to choose from (eg Wiliam, 2011). So it comes as no surprise that, within John Hattie's recent monumental survey of 150 factors that affect students' learning, matching teaching to the learning styles of students was found to have an insignificant effect, little above zero (Hattie, 2012:79).

Practice of learning styles

For some years now, the research evidence has been clear, consistent and convincing: learning styles are invalid, unreliable and have a negligible impact on practice. How, then, am I to explain the fact that in virtually every school or college where I have given a talk on T&L I have found at least one classroom with posters challenging students to discover whether they are visual, auditory or kinaesthetic learners? Elsewhere (eg Coffield, 2012), I have offered a variety of possible explanations (for example, intuitive appeal; simple but spurious solutions to complex problems of T&L; need to differentiate and classify) for this curious paradox, but on rereading my comments, I realise that I have omitted the most obvious and likely reason: most practising teachers and **senior leaders become steadily more and more remote from the research literature as they get further away from initial teacher education**. A recurrent programme of professional updating is urgently required to keep staff acquainted with that literature, which is, admittedly, often couched in the most off-putting jargon, although the best of it is not. We are back to the argument I made earlier about the need for all teachers, and especially those whose job it is to exercise leadership on T&L, to have a firm knowledge-base in the subject. Without such a knowledge-base, leadership becomes little more than 'the blind choice of one route over another and the confident pretence that the decision was based on reason' (Harris, 2004:5). One of the principal criteria of a profession is that it possesses a body of specialist knowledge that it uses, together with the craft knowledge derived from practice, to improve.

What is unprofessional in my view is to administer a learning styles questionnaire to all new students at the beginning of term, analyse the results, inform the students of their preferred learning style, file the forms away in a drawer and then to continue teaching as before without any further reference to learning styles. To act in such a way raises and dashes students' expectations, leaving some of them (whom I have met) with the erroneous idea that, as they believe themselves to be 'kinaesthetic' learners, the whole curriculum should be presented to them kinaesthetically.

Coda

The Roman emperor Hadrian, who ordered the construction of the Pantheon in Rome as well as the wall from the Solway Firth to Tynemouth, was once described as follows: 'In one and the same person [he was] stern and cheerful, affable and harsh, impetuous and hesitant, mean and generous, hypocritical and straightforward, cruel and merciful and always in all things changeable' (Historia Augusta, 1921). Instead of building on these insights into the complexities, inconsistencies and apparent contradictions of human beings known to the ancients and to the greatest dramatists and novelists such as Montaigne, Shakespeare, Dickens and Tolstoy, learning style theorists have developed simplistic, self-report tests, devoid of context, that force the takers of these tests to choose between predetermined categories such as 'pragmatists' or 'theorists'; the tests do not allow you to be a pragmatic theorist or a theoretical pragmatist. It is high time that the teaching profession moved on from these pre-scientific instruments that carry the real danger of labelling and trapping students and adults into fixed categories that have little or no research evidence to back them.

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Triumph Road
Nottingham NG8 1DH
T 0845 609 0009
F 0115 872 2001
E college.enquiries@nationalcollege.gsi.gov.uk
www.education.gov.uk/nationalcollege

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