# Conditions for learning: a footnote on pedagogy and didactics Paul Andrews

An interesting English tradition is the almost complete avoidance of words like pedagogy and didactics in educational discourse. Indeed, I know of several colleagues working in prestigious English universities who claim proudly that they never use them in their work with trainee teachers. Some years ago, my perspective would have been similar, as I was locked into an educational worldview that encouraged beginning teachers to find a style of teaching suitable to them. The use of the word 'style' in this manner allowed me to work within a pretence of intellectual respectability while avoiding the truth of the matter: that English education is essentially atheoretical. Sadly, and I know I have allowed myself to fall into both an acceptance and a use of this pernicious vocabulary, the word 'trainee' in relation to teacher education confirms, through its implicit sense of teaching as replicable skill, the antitheoretical nature of English education.

In my response (*MT202*) to Barbara and Derek's article (MT201), I suggested that when my Hungarian colleagues talked about 'pedagogy' they probably meant 'didactics', due to their knowing that the latter was not commonly used in English. Indeed, when I did a search in three UK-based online dictionaries, the word 'didactics' failed to turn up any hits. However, 'didactic' was in all of them, with their definitions confirming what I thought I knew already - that on the rare occasions when the English use the word it is almost exclusively pejorative. For example, the *Cambridge* suggests that it signals an intention 'to teach, especially in a way that is too determined or eager, and often fixed and unwilling to change', although the Oxford presents a slightly less disapproving perspective when it suggests that it is

'intended to teach or give moral instruction'.

In respect of 'pedagogy', all three dictionaries offer entries related to teaching and the study of teaching. In this respect there is a clear difference between didactic and pedagogy. Indeed, the perspective of the Oxford, which writes that pedagogy is 'the profession, science, or theory of teaching', is clearly removed from the anti-intellectual perspective underlying definitions of didactic. However, when one considers 'pedagogue', which one might expect to refer to persons with an interest in pedagogy, the underlying meaning reverts to disapproval.1 Thus, despite allusions to educational theory underlying the definitions of pedagogy, the atheoretical nature of English education finds support in the essentially equivalent sentiments embedded in both 'didactic' and 'pedagogue'.

The position on the continent seems to be different. Here, it is generally understood that didactics (the word 'didactic' as we use it seems to have no equivalent meaning in any of the languages with which I am familiar) and pedagogy have well-defined and very different meanings, and colleagues use both with comfort and confidence. My understanding, which draws on European educational literature and discussion with colleagues in a number of countries, is that pedagogy includes an examination of the curriculum, in both broad and narrow forms, and the underlying systemic aims and objectives of education. It is a broad and inclusive concept that transcends subject boundaries but acknowledges general theories of teaching and learning. Pedagogy includes didactics, which comprise the strategies and warranted approaches to subject teaching and learning, which may vary from one

subject to another, but would necessarily include consideration of the sequencing of ideas and the extent to which the sequence is intellectually coherent. Didactics also acknowledge theories of teaching and learning but from the subject-specific perspective. Didactics would include both the day-to-day and the in-the-moment decision making of teachers and the manner in which they are informed. It is probably true to say that the English have no word for the general concept, familiar to continental colleagues as pedagogy, as we tend to reserve the word for what they would describe as didactics.

I have no idea how the English state of affairs came about and, perhaps, the apparent inconsistencies between didactic and its derivative and pedagogy and its derivatives provide reasons for our shying from their use. However, my fear is that the real reason lies in an almost obsessive rejection, at all levels of English society, of theory. Indeed, the lack of any European resonance with our particular meaning of didactic provides further evidence in this respect. Whatever the reasons, it is disappointing that we persist in avoiding an intellectually robust vocabulary that would validate our professional discourse.

#### Paul Andrews teaches in the Faculty of Education at the University of Cambridge.

#### Note

1 The Longman suggests that a pedagogue is 'a teacher, especially one who thinks they know a lot and is strict in the way they teach'. The *Cambridge* suggests that he or she is 'a teacher who gives too much attention to formal rules and is not interesting' while the *Oxford* suggests that a pedagogue is 'a teacher, especially a strict or pedantic one'.



The Association of Teachers of Mathematics for mathematics educators primary, secondary and higher



This document is copyright ATM and others. Permissions: copyright@atm.org.uk

This is the usual

copyright stuff -but it's as well to

check it out ...

The attached document has been downloaded or otherwise acquired from the website of the Association of Teachers of Mathematics (ATM) at www.atm.org.uk

Legitimate uses of this document include printing of one copy for personal use, reasonable duplication for academic and educational purposes. It may not be used for any other purpose in any way that may be deleterious to the work, aims, principles or ends of ATM.

Neither the original electronic or digital version nor this paper version, no matter by whom or in what form it is reproduced, may be re-published, transmitted electronically or digitally, projected

or otherwise used outside the above standard copyright permissions. The electronic or digital version may not be uploaded to a website or other server. In addition to the evident watermark the files are digitally watermarked such that they can be found on the Internet wherever they may be posted.

Any copies of this document MUST be accompanied by a copy of this page in its entirety.

If you want to reproduce this document beyond the restricted permissions here, then application MUST be made for EXPRESS permission to copyright@atm.org.uk



The work that went into the research, production and preparation of this document has to be supported somehow.

ATM receives its financing from only two principle sources: membership subscriptions and sales of books, software and other resources.

#### Membership of the ATM will help you through

important-you must read this

Now, this bit is • Six issues per year of a professional journal, which focus on the learning and teaching of maths. Ideas for the classroom, personal experiences and shared thoughts about developing learners' understanding.

• Professional development courses tailored to your needs. Agree the content with us and we do the rest.

- Easter conference, which brings together teachers interested in learning and teaching mathematics, with excellent speakers and workshops and seminars led by experienced facilitators.
- Regular e-newsletters keeping you up to date with developments in the learning and teaching of mathematics.
- Generous discounts on a wide range of publications and software.
- A network of mathematics educators around the United Kingdom to share good practice or ask advice.
- Active campaigning. The ATM campaigns at all levels towards: encouraging increased understanding and enjoyment of mathematics; encouraging increased understanding of how people learn mathematics; encouraging the sharing and evaluation of teaching and learning strategies and practices; promoting the exploration of new ideas and possibilities and initiating and contributing to discussion of and developments in mathematics education at all levels.
- Representation on national bodies helping to formulate policy in mathematics education.
- Software demonstrations by arrangement.

### Personal members get the following additional benefits:

- Access to a members only part of the popular ATM website giving you access to sample materials and up to date information.
- Advice on resources, curriculum development and current research relating to mathematics education.
- Optional membership of a working group being inspired by working with other colleagues on a specific project.
- Special rates at the annual conference
- Information about current legislation relating to your job.
- Tax deductible personal subscription, making it even better value

## Additional benefits

The ATM is constantly looking to improve the benefits for members. Please visit www.atm.org.uk regularly for new details.

LINK: www.atm.org.uk/join/index.html