

Educators find themselves in a dilemma: the teaching of a subject and its assessment are two processes which are to a large extent incompatible.

Pedagogy is at its most successful when students are interested in the subject matter for its own sake. That is, successful education, in general, requires the student to be intrinsically motivated: they must like what they are doing. However, educators, employers and, indeed, the general public require some assessment of a student's academic performance. This very assessment (whether it is by examination or continuous assessment) introduces an extrinsic motivating factor.

Research shows that both extrinsic and intrinsic motivation can improve work output on a structured task. However, these different motivational factors have different effects on creativity. Specifically, extrinsic motivation tends to reduce creativity in unstructured tasks.

Educators experience this phenomenon at an intuitive level. Early on in the year, when exams seem a long way away, students will discuss material which is of general academic interest but which may not be examined. However, as exams approach, attention focusses on acquiring only those aspects of learning which are relevant to examinations. The general interest in the subject matter drops to be replaced by frenetic attention to the details of the examination.

The effect of exam-oriented attention differs between students but is most marked amongst those who are high in anxiety. It is recognisable in exam scripts as a uniformity in presentation. In particular, it appears as a 'playing safe' strategy in which new and critical ideas are avoided in preference for known, derived information.

In vain does one exhort students to try to be creative with ideas. The effect of exam fever almost always (there are some exceptions) degrades the quality of performance at the higher levels.

There is, of course, no easy solution to the dilemma of pedagogy versus assessment. However, it does seem a valuable objective of all higher education to try to instil a love for the subject matter for its own sake, thereby trying to counter the negative pedagogic effects of assessment.