



# Disability, Compensation and Assessment in Higher Education

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**Abstract:** In recent years there has been a convergence of two trends in higher education: a focus on the role of intended learning outcomes and their assessment in the management of academic standards, and a concern with equality of opportunity and the removal of barriers to full participation in higher education by students with disabilities. This paper argues that the ways in which policies have been developed by universities to address the latter have tended to undermine the intentions behind the former. It is concluded that there is no legitimate role for compensation in the assessment of disabled students, but rather attention should be focused on the exclusion of extraneous and, in terms of the intended learning outcomes in question, unjustified elements within assessment tasks.

**Keywords:** Disability, Assessment, Compensation, Higher education, Learning outcomes.

## INTRODUCTION

Recent years have seen an increased focus amongst the global higher education community on the importance of making explicit the intended learning outcomes of programmes of study. Increasingly, national higher education quality assurance regimes require higher education programmes to be expressed in terms of intended learning outcomes and the notion has been fundamental to the development of national qualifications frameworks. Such frameworks - the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland, for example, or the Scottish Credit and Qualifications Framework (SCQF) - are predicated on the principle that learning is defined and measured according to the intellectual complexity of the outcomes that students achieve.

An important consequence of this trend has been a focus on the alignment of summative assessment and intended learning outcomes. Indeed, a key test of the adequacy of assessment has become the degree to which it constitutes a valid and reliable test of the achievement of a specified learning outcome (QAA, 2016). Not only is this principle enshrined in the precepts of national quality assurance frameworks such as the UK's Quality Code (QAA, 2016), but is increasingly one of the fundamental tests of the assurance of academic standards on which external examiners are required to comment.

An equally significant, although on the face of it, unrelated trend over recent years has been a concern in higher education with equality of opportunity and the promotion of inclusive practice in all aspects of delivery. In many countries this trend follows a wider political agenda of tackling all forms of unfair discrimination. In the UK, for example, the 2010 Equality Act replaced previous legislation aimed at preventing discrimination on specific grounds (sex, disability, race etc.) with a single piece of legislation making discrimination on a wide variety of grounds unlawful in employment and in the provision of services (including education.) Although the pace of change has certainly not been even, universities in many countries have made considerable efforts in recent years to reduce the barriers to participation faced by disadvantaged groups, especially perhaps those with disabilities.

This paper explores the relationship between these two trends and specifically considers the issue of compensation in the assessment of students with disabilities. It is argued that, however laudable the intention, many of the widely practised forms of compensatory assessment run counter to the prevailing understanding of the relationship between assessment and intended learning outcomes. It is argued that the very concept of compensatory assessment is undermined by the contemporary view of the relationship between intended learning outcomes and the purpose of



summative assessment. The paper reaches the conclusion that it is often the 'extraneous' elements of assessment which test incidental and unintended abilities which are responsible for unfair discrimination against students with disabilities.

### SUMMATIVE ASSESSMENT AND LEARNING OUTCOMES

Arguably, some form of assessment of 'learning outcomes' is inherent in the very idea of teaching (Flew, 1976). It is difficult to imagine, for example, a conceptualisation of teaching that is not oriented to some change in the knowledge, skills or disposition of the learner; the anticipated change could be vague, ill-defined or even completely unformulated but nonetheless seems logically entailed by the act of teaching. At the same time, the explicit formulation and articulation of intended learning outcomes by institutions of higher education is a relatively recent phenomenon. There are probably several reasons why a focus on these has come to the fore in recent years, but one of the most important has undoubtedly been a growth in demands for accountability.

In any situation where public money is invested, it is natural enough that the public should expect some justification for the way in which this money is spent. In the case of higher education, it is not only the use of public money that is of concern, but also the extent to which the graduates of higher education programmes can be relied upon to deliver the level of performance required of them. It is not simply a question of ensuring that publicly funded higher education gives value for money but, more specifically, it is a concern with ensuring that the holders of certain qualifications actually do possess the skills and knowledge which the qualifications denote (Messick, 1989). Obvious examples where this matters at both an individual and societal level include doctors, dentists, lawyers and teachers: it is a matter of significant individual and public concern to know what, exactly, individuals qualified in these fields can be expected to know and be able to do and with what degree of confidence we can assume any given doctor, dentist, lawyer or teacher actually does measure up to this expectation.

The formal statement of intended learning outcomes, then, can be seen as one measure by which higher education institutions are rendered accountable for the programmes they offer and the graduates they certify. But the specification of learning outcomes is useless unless there are also in place valid and reliable means of determining whether or not an individual has achieved these outcomes; in other words, there need to be valid and reliable schemes of summative assessment.

Assessment is said to be *valid* when it measures what it purports to measure and *reliable* when it produces stable and consistent results (Cozby, 2001). Logically both conditions must be fulfilled in order for a scheme of assessment to be able to differentiate between those who have achieved a given learning outcome from those who have not<sup>1</sup>. The specification of learning outcomes in higher education therefore, and hence to a large extent its public accountability, depends on reliable and valid assessment.

How straightforward it is to achieve this reliability and validity, however, depends to a large degree on the nature and complexity of the intended learning outcome and the ease with which it can be operationalised. A relatively straightforward learning outcome such as 'on successful completion of the course the candidate will be able to remove and refit a car engine without supervision' lends itself to a relatively straightforward form of assessment: the candidate is required simply to remove and refit a car engine without supervision. It seems a reasonable inference that, barring some kind of a fluke, a candidate who does this can be considered to have met the learning outcome in question and can be certified as having demonstrated it. But a learning outcome such as 'use and apply a wide range of economic models to analyse contemporary and historical macroeconomic events, and formulate and propose appropriate macroeconomic policies'<sup>2</sup> is far less straightforward. Not only does such a learning outcome lack specificity – what constitutes a 'wide range' of economic models, for example, and must the candidate be able to apply them to *any* contemporary and historical macro-economic event or a specific sub-set? – but it does not seem to imply the use of any particular method of assessment over any other. Could this outcome be assessed by an oral presentation, for example? Or can it be assessed through an extended essay, written with the aid of books, journals and other sources? Could it be assessed through the medium of song, poetry or dance? Or a three hour unseen examination?

Whilst a case may be made for testing the same learning outcome by a variety of means, an often neglected consideration is whether the test in question tests only the stated learning outcome or, perhaps surreptitiously, other abilities as well. Take, as an example, the classic case of the three-hour unseen examination: whatever knowledge and skills it might be considered a valid test, it also tests the ability of the

<sup>1</sup> Technically it is possible for a test to be reliable but not valid, but reliability is a necessary, although not sufficient, condition of validity.

<sup>2</sup> Taken from University of London International Programmes Course Information 2016-17, EC2065 Macroeconomics.  
[http://www.londoninternational.ac.uk/sites/default/files/65\\_cis.pdf](http://www.londoninternational.ac.uk/sites/default/files/65_cis.pdf)



examinee to perform the task in question within a specific time limit, without the aid of books, journals or other media and without the benefit of seeking clarification from the examiner or of discussing the topic with other people. Compare this with another method, say the production of an extended essay on the topic over a period of weeks. Whilst ostensibly this may constitute an equally valid test of the same learning outcome, it does not test the ability to demonstrate the knowledge and skill in question in a three hour period, without the aid of source materials or interaction with others. Indeed, if we leave aside the substantive subject matter which is the subject of assessment, it is possible to see that the two assessment methods actually test quite different abilities.

Whilst the assessment of 'extraneous' abilities might not ordinarily matter very much (as long as all candidates are assessed in the same way) in the case of students with disabilities, as we shall now see, it has significant implications.

#### DISABILITY AND THE PROBLEM OF COMPENSATION

A major development in higher education (as well as other educational levels) over recent years has been a growing concern with 'inclusivity': finding ways to remove the barriers to full participation in higher education by students with disabilities. In some countries this is backed by positive legislation. In the UK, for example, the 2010 Equality Act places a positive duty on educational providers to make 'reasonable adjustments' to their provision to eliminate disadvantage suffered by students and others. This duty applies to every aspect of a student's engagement with a higher education institution, from application to graduation (Equality Challenge Unit, 2010). Whilst in some areas the interpretation of this duty is reasonably straightforward, such as in the design or modification of buildings to facilitate access, or in the provision of assistants to take notes during lectures, in the area of assessment the situation is considerably less straightforward.

Partly in response to specific legislation (such as the 2010 Equality Act in the UK and the 1990 Americans With Disabilities Act in the US) but also in response to a growing general concern with equality and fairness, higher education institutions around the world have developed policies aimed at addressing discrimination in the area of assessment (Konur, 2002; Sharp and Earle, 2000; Lombardi et al, 2016; Tindall & Foley, 2011). Whilst such policies obviously vary in detail, some common themes can be identified. First, it is generally the case that a student who feels they should be granted an alternative form of assessment has an onus placed *on them* to demonstrate that this is deserving. The entitlement to a specific alternative form of assessment derives from the

demonstration of a specific impairment and the evidence of health care or disability professionals is often required before such an entitlement is granted. Correspondingly, students who fail adequately to demonstrate the expected type and extent of impairment will not be granted an alternative assessment and students who are deemed fraudulently to have claimed a particular impairment may well be liable to disciplinary action for having attempted to gain an unfair advantage over their contemporaries.

What this tells us is that allowing disabled candidates alternative forms of assessments is essentially compensatory in nature. Impairment is being construed primarily as a form of *unfair disadvantage* which educational authorities have a moral duty to redress. To grant alternative assessment to a candidate without impairment would therefore be unjust, in that it would confer an unfair advantage on that candidate. If an examination has to be sat in three hours, but candidate X, who has no measurable impairment, is granted 4 hours in which to sit it, then clearly he has been granted an advantage over all of the candidates who are allowed only 3 hours, and as the moral outrage likely to result from such an act clearly reveals, this advantage would be regarded by most people as palpably unfair. The point, then, is that alternative assessments are here construed as conferring on the candidate an advantage which is either justified or not by the nature and extent of their impairment.

Whilst in many contexts the decision to redress some disadvantage suffered by certain people is entirely laudable and, indeed, often taken as an index of a society's level of civilisation and compassion, in the area of educational assessment things are less simple. To see why this is so we need to consider a second general theme typical of policies which seek to address disability and assessment in higher education, the assumption that alternative forms of assessment really are in fact *equivalent*.

Following the earlier discussion, it is reasonable to summarise the issue of equivalence in assessment as follows: assessments may be said to be equivalent when they constitute equally valid and reliable tests of the same intended learning outcomes. Not only does this principle tend to be formally enshrined in individual institutions' policies, but importantly it is implicit in the very purpose of assessment, namely to differentiate between those who achieved a particular set of learning outcomes and those who have not. To advocate the use of assessments for a subset of students which do not test the same learning outcomes would be to undermine the very purpose of assessment.



However much this may be the intention behind offering alternative forms of assessment to students with disabilities, when we consider the issue of the unintended assessment of ‘extraneous’ features discussed above, it is possible to see that many cases of alleged equivalence are nothing of the kind. Consider again the example of the three hour unseen examination. As we have seen, this is in fact a test of much more than a candidate’s knowledge of a given subject, ability to solve problems of a certain type and complexity or to produce coherent arguments on certain specified topics. Whatever else it may be, it is also a test of the candidate’s ability to do these things in a fixed time period of three hours and without the benefit of access to reference materials or interaction with others. It follows, therefore, that whilst a candidate may equally demonstrate their knowledge of, say, macroeconomic theory by writing a coursework essay about it outside of examination conditions, doing so does not also constitute a test of these ‘extraneous’ abilities which are tested by the three hour traditional examination. In fact, tests a quite different set of ‘extraneous’ abilities.

Of course the abilities in question are only ‘extraneous’ in the sense that they are not explicitly included in the list of intended learning outcomes allegedly being assessed. If, on the other hand, the assessors were explicitly to declare that they do not mean to assess these items, thereby rendering the two forms of assessment genuinely equivalent, then it follows that any student, irrespective of disability, should be able to elect to be assessed by either method.

We can see, therefore, that the principle of compensation (which we have argued is usually inherent in alternative assessment policies) is fundamentally incompatible with the principle of equivalence, which we have shown to be logically entailed by the very idea of alternative assessment. If the two forms of assessment are genuinely equivalent – that is, they test the same learning outcomes and, importantly, *only* those learning outcomes – then there is no reason at all why they should not both be available to any candidate. The only conceivable rationale for restricting the availability of one of the forms of assessment to those people with measurable disabilities is that the form of assessment in question is compensatory: in other words that it exempts disabled candidates from having to demonstrate some of the skills or abilities that other students are required to possess.

To illustrate this point, let us consider one of the most common cases of ‘alternative’ (or allegedly so) assessment, widely used in universities around the world: the granting of extra time for some (disabled) candidates in examinations (Colker, 2008). On the face of it, this practice seems reasonable, fair and just, just as the refusal to allow such candidates extra time would widely be regarded as discriminatory. However, when we include

the extraneous skills which are tested by a three hour examination – specifically, the ability to complete the required tasks within three hours – then, quite obviously, someone who is permitted four hours in which to complete the same examination is exempted from need to demonstrate this particular skill. And this exemption is based on the principle of compensation: the candidate in question has a disability which means that they are significantly less able than others to complete tasks in limited time periods, therefore the time limit is adjusted to one in which they can manage the task. But has this candidate demonstrated the same skills and knowledge as the others who were only allowed three hours? The answer must be no they have not.

There are two possible logical resolutions to this situation. Either the requirement to demonstrate the skills and knowledge in question within a strict three hour period is made explicit (along with all the other restrictions imposed by classic examination conditions), in which case all candidates, irrespective of disability, must be made to complete the examination within three hours. Alternatively, the assessing authorities could admit that there was no intention to assess the ability of candidates to perform the required tasks within a strict three hour time limit, and formally remove this from the list of skills and abilities which the assessment tests. However, to do this would entail the conclusion that any student should be permitted to sit the examination in either three hours or four hours, or logically, without any time limit at all (Sharp & Earle 2001).

This last point, in particular, has important implications. If two or more different assessment tasks are deemed genuinely to be equivalent tests of a given set of intended learning outcomes, then it is difficult to find any rationale for not opening all of these tests to all candidates. Admittedly this seems an odd proposal in the case of a three hour versus a four hour examination, and it is hard to imagine circumstances when such an option would seriously be proposed. Nevertheless, if we are to avoid the difficulties inherent in the principle of compensation – namely, that the practice threatens to undermine the very purpose of assessment – then it is unavoidable as a conclusion.

Whilst it is easy to characterise this position as a highly conservative one which could have the effect of denying alternative assessments to disabled candidates (see Konur, 2002), an altogether more radical, and fundamentally inclusive, conclusion is possible. A principal argument developed here is that those unintended, or ‘extraneous’ skills and abilities which assessments inadvertently test, also need to be identified as amongst the learning outcomes assessed by a given assessment task. By carefully and comprehensively identifying such abilities and making explicit decisions



about whether or not there is an intention to test them, it becomes possible to design genuinely fair and inclusive assessment tasks. If, for example, it is agreed that there is no explicit intention to test candidates' abilities to demonstrate their knowledge of macro-economic theory *in a time constrained situation and without access to resources or interaction*, then assessment tasks can be designed which do not test these extraneous and irrelevant (from the point of view of the knowledge and skills which *are* being tested) abilities. Doing so not only forces a more precise relationship between assessment tasks and intended learning outcomes but, importantly for the present discussion, may eliminate the very constraints which are the source of unfair discrimination for many disabled students. Of course this would also mean that some constraints will be justified and, therefore, exemptions from them could not be given without compromising the integrity of the outcome. But this is fair and just: if skill X really is required to become qualified in Y, then people who through disability cannot demonstrate skill X should legitimately be prevented from becoming qualified in Y. Student airline pilots who cannot see the runway on landing should be prevented from becoming qualified pilots: seeing the runway is a demonstrably necessary ability for a pilot to possess. It is an altogether different proposition to claim that competent economists need to be able to demonstrate their ability to conduct economic analyses in closed three hour sessions without the benefit of books, calculators, computers or other economists.

## CONCLUSIONS

This paper has presented the argument that the practices adopted by modern universities concerning the assessment of students with disabilities tend to be based on two contradictory principles, namely those of *compensation* and *equivalence*. It has been argued that the principle of compensation, although inherent in most alternative assessment practices, actually undermines the very purpose of assessment which is to differentiate between those who possess some knowledge, skills or abilities and those who do not. The problem can, however, be solved when the 'hidden' or 'extraneous' abilities indirectly or inadvertently tested by different forms of assessment are rendered explicit. It has been suggested that it is these aspects of assessment – those features which test extraneous knowledge, skills or abilities not included in the intended learning outcomes – that are potentially discriminatory in their consequences. Thus rather than offering alternative assessments, which logically should be made available to any student if they do indeed test the same learning outcomes, a more inclusive approach is to ensure that assessment tasks are designed in such a way that they test what they are intended to test and nothing else.

This conclusion suggests areas of future empirical research and of policy development. Empirically, systematic audits of allegedly alternative assessments offered by institutions of higher education would allow an analysis of the extent to which these are genuinely alternative or whether, following the arguments developed in this paper, they are in fact compensatory in nature. In terms of policy development, the conclusions of this paper suggest that much needs to be done at both the level of the individual institution and that of national quality and standards oversight bodies. In particular, the arguments developed above suggest that policies ought to discriminate carefully between approaches to alternative assessment which are compensatory in nature and those which are not. Furthermore, assessment policies and guidelines should be developed to ensure that assessments are designed to test intended learning outcomes only and not, other, extraneous, abilities which may discriminate unfairly against candidates with disabilities.

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