

# Open Education 2030

JRC-IPTS Call for Vision Papers

## Lifelong Learning

### Opening Education through Competency Based Assessment

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*Although Open Educational Resources and Practices, and other innovations contain huge potential to transform lifelong learning, there are unnecessary regulatory barriers, and Competency Based Assessment may be the key to removing these barriers and unleashing a wave of innovation.*

There are two things you need to innovate. Competition and the freedom to innovate. There is no shortage of innovation in teaching and learning in the world today and Open Education Resources and Practices are among the most significant of these. Indeed, access to information is now so easy that the best of these practices can spread very rapidly. However, the surprisingly slow rate of change has shown that there are barriers, and one of those is the regulation of teaching and learning methods. Competency Based Assessment has the potential to break through that particular barrier by giving both students and providers much more freedom to choose their preferred learning methods. This will lead to a huge increase in competition and innovation in higher education and in particular, lifelong learning within higher education, that will both improve standards and drive down costs. In such a scenario of massive disruption it would be unwise to try to predict what the outcome would look like in 2030, except to say that it would look quite different to what we have now. In this essay, I will argue that a small change like Competency Based Assessment could have huge implications for Lifelong Learning within Higher Education.

Imagine if you had been in the music business in the nineteen sixties and a regulating body for that industry required that the only allowable way to publish recordings was to use a specific grade of vinyl, of a specific thickness, which could only spin at certain specific rotational speeds. An exaggerated scenario perhaps, when looking back at the level of innovation in that industry in recent years, but not inconceivable, particularly in view of the unsuccessful resistance of the industry to the more recent innovations. The consumer is only interested in listening to music and is largely uninterested in the mechanism through which this happens. We are generally agreed that any unnecessary restrictions on how that service is supplied will restrict innovation in that industry.

But that is how it is in most of higher education. Both external accreditation bodies and internal academic committees within institutions, not only wish to approve of the content of courses, but also have a say in the nature of the learning process. Why is this so? A university president recently expressed understandable concern about the idea that many students were not attending college, but instead were successfully passing their examinations from notes passed from their classmates by mobile phone (<http://goo.gl/uEsNs>) [1]. If you examine this, it becomes clear that his concern is that the process by which the students are acquiring the knowledge to pass their examinations is not necessarily achieving all the learning objectives that the institution is aiming for. It is a reasonable concern, but does indicate a lack of confidence in our assessment methods. You might argue that we are saying that we cannot be sure that our summative assessment methods guarantee the broad range of



outcomes we desire and so we are specifying the experience the student must go through in order guarantee the outcomes.

Solving the problem of guaranteeing outcomes through specifying learning experiences has two problems. The first one, and the thrust of this essay, is that it stifles innovation and agility. The second problem is that it may not achieve the desired outcomes anyway. Learning is not a very deterministic activity. It is too complex a process for anyone to predict outcomes based on inputs. Any quality assurance professional within industry will confirm that you cannot guarantee outputs based on inputs. You need to measure what you are trying to achieve. In education that means measuring all the learning outcomes that you wish to achieve is the only way to guarantee these outcomes are being achieved..

The movement away from defining learning content to defining learning outcomes in Europe and internationally is a significant step forward for higher education. It has encouraged educators to make explicit many of the objectives that had previously been unstated. Additionally, it has both encouraged and enabled the development of assessment methods that measure achievement against these explicitly defined outcomes. Theoretically, if an institution defines the learning outcomes of a course as well as credible assessment methods for measuring all of those outcomes, this can provide a better guarantee of outcomes than a deterministic description of the learning methods.

This idea is at the core of Competency Based Assessment which includes the principle that if a student can demonstrate in an examination that he or she has the competences defined in the learning outcomes then the credits can be awarded without the necessity of going through a specific learning experience. Competency Based Assessment is currently considered to be a subset of Prior Learning Assessment (PLA) and one of many methodologies for assessing claims of prior learning. However, the existence of Competency Based Assessments in certain topics means that it can be used as a strategy for gaining accreditation by students who do not possess the necessary prior learning in that topic. If the student can see what needs to be learned and find a way of learning that independently of the institution carrying out the assessment, then that student can apply to take competency based examinations in order to gain credits. Indeed this idea of “testing out” is a central part of a recent announcement by the University of Wisconsin of a flexible degree program where students could gain credits from purely taking the examinations. (<http://goo.gl/Ja82v>) [2]

So is this a “game changer”? Many have been commenting recently on the disruptive potential of MOOCs but it is interesting to note that many others believe that competency based assessment may have a bigger impact. In a recent Inside Higher Ed report on their own survey of U.S. university presidents (<http://goo.gl/uc3we>) it stated:

*“Only 14 percent of presidents strongly agree, and another 28 percent agree, that massive open online courses have “great potential to make a positive impact” on higher education; 31 percent disagree or strongly disagree, and the rest are neutral. But another higher ed innovation seems to have captured their attention: a full 60 percent of presidents agree or strongly agree that awarding academic credit based on students’ competency rather than seat time holds “great potential” for higher education.” [3]*

Why might they think this? Could it be that they know that their ability to influence change in teaching methods is limited by what others allow them to do? If Competency Based Assessment allows universities to grant credits based purely on measuring outcomes as opposed to inputs it could radically affect cost models in higher education and lifelong

learning. Universities that offer such assessment might dramatically increase enrolment from learners who either claim that they are competent already, or wish to gain the specified competences elsewhere at much lower cost. This development, known as disaggregation or unbundling has been predicted for some time now. Open Educational Resources and Practices, including MOOCs, have been heralded as a disruption that will drive this unbundling process but it is clear that there are barriers to rapid change within the existing system. Competency Based Assessment may be the key to breaking down these barriers and unlocking the potential of many innovations, including OER. The separation of learning from assessment will unleash a wave of competition in the provision of learning experiences. Such competition and freedom to innovate will improve the quality of provision and also drive down costs.

It should be pointed out that this separation of activities is not new. In the past universities did accept candidates for examination that did not attend classes. Even today this is practiced widely by professional bodies particularly in the context of lifelong learning. Where it is practiced there is healthy competition in the provision of courses to prepare candidates for examination.

So what will the new world of higher education and lifelong learning look like in 2030 when the principle of Competency Based Assessment has become widely accepted and the power of Open Educational Resources is being exploited? Well for starters, the distinction between the higher education and lifelong learning will have finally disappeared. Whereas some young people may choose to attend higher education on a full-time basis, others will choose to work and gain their education in a more flexible way. Their motivation for this may be purely financial. Because of disaggregation, their courses will cost less and they will also be able to work as they gain their education. However, in addition, their learning experiences may be even better. Technology will largely be able to replicate a similar social experience for such students that many consider is a valuable and irreplaceable characteristic of the full-time campus based experience. This may even be improved as they are also exposed to the more realistic social experiences of the workplace. The quality of learning will also be improved. Apart from having access to excellent free learning materials and courses, learners will be situated in the workplace where they will be able to see the value and relevance of what they are learning and where they may have access to advice and mentoring. There is every reason to believe that it will come to the point where part-time lifelong learning is the norm and full-time undergraduate education is a less common activity.

But how will it look different from within the higher education institutions? Emphasis will have moved away from the teaching process. Where institutions do provide courses, they may move towards curation of materials (often, if not mostly OER) and guidance of students towards assessments. Many institutions may decide not to provide courses but instead define learning outcomes and assess achievements of candidates against these objectives. Because institutions will have little control over the learning experiences of students, they will have to significantly improve assessment methods, particularly in regard to those outcomes that may have previously been implicit in the defined learning experiences but not necessarily assessed. There is a danger that this will drive up the cost of assessment and negate the cost improvements delivered by OER and competition in the learning process, but as the process of unbundling gains acceptance it is to be expected that there will be more emphasis on, and improvement in, assessment methods.

In conclusion, I would like to state that Open Educational Resources and Practices have huge potential to improve quality and costs in higher education and lifelong learning, but that we need to break down barriers to their adoption before they can have that impact. One of the

barriers is the over-regulation of the learning experience. Competency Based Assessment has the potential to break down that barrier and through competition unleash a wave of innovation that will rapidly transform higher education and lifelong learning.

## References

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