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Abstract: New Paradigm for Quality Assurance

The new qualification frameworks' stress on *learning outcome* indicates a 'new paradigm' for our way of assessing higher education. With this in mind, the presentation discusses the very concept of learning outcome, how it may be assessed and its suitability as a steering parameter. A quick survey of how some 'pioneering' national QA agencies have adapted to the new orientation offers some hints about likely trends in the future.

The main part of the presentation is a discussion of what changes may – or should – be expected in quality assurance, given the new orientation. It is argued that reference frameworks as well as processes must be affected, as will the relationship between direct and indirect approaches, creating a modified 'hierarchy' of quality indicators. As QA is drawn closer to didactic concerns more prominent roles must be taken by the teaching academics. The relationships between the programme and the institutional levels and between internal and external quality assurance may change as a result of this.

Jon Haakstad:

A New Paradigm for Quality Assurance?

Learning outcome as quality indicator; the background

It is reasonable to assume that the introduction of qualification frameworks (Bologna Working Group, 2005) and the accompanying stress on students' learning outcome (LO) must somehow influence existing mechanisms for monitoring and steering higher education, including quality assurance. The attainment of learning aims, always the end orientation point of educational programmes, also becomes the all-important quality indicator. Where formerly a certain learning outcome was (more or less) taken for granted, given the right input, outcome may now be regarded as the crucial variable, by which the quality or success of a programme is determined. Are we speaking of a paradigm shift?

It is of course no strange thing that the outcome target of a process is also the most important quality assessment criterion. The problem, though, with educational outcomes is that the object of assessment is an immaterial entity. How can institutions monitor and steer according to something that actually happens or exists inside the students' minds? And how can educational quality be fairly assessed when this quality is as much dependent on the student's ability and effort as on what the institution actually provides? And with reference to *external* quality assurance, how distant can quality assurance be from the actual objects of assessment – and still make valid observations and judgements?

Since the early days of formal quality assurance there have been discussions about how to assess the contribution that educational provision actually makes to the students' learning in terms of 'value added', i. e. the difference in skills and knowledge between the intake and candidate situations (Harvey and Green, 1993; Harvey, 2004 -09). A related concept to describe educational performance is that of 'transformation': the growth in skills, knowledge, maturity, etc. that a student undergoes through an educational process. But will 'process' and 'contribution' be less important concepts now, when it is outcome that matters, in whatever way it has come about? And will it be any easier to assess outcome than 'value added' or 'transformation'?

The present shift of attention is, on the one hand, uncontroversial and universally acclaimed. Of course it is the learning outcome that matters; that is why we have education! On the other hand, however, it hides important epistemological contradictions. The early attempts to search for outcome in terms of value added took their inspiration from a complex concept of educational quality and a sceptical view of traditional quality assurance: current QA methodology was looked upon as reductionist, superficial and bureaucratic in the way it dealt with a many-facetted and endlessly changing teaching/learning situation. When seen from this point of view, serious concern with learning outcome implies an open, broad and research-like approach.

But there is also another possibility. Learning outcome – or its significance – may be reduced to a defined number of parameters that lend themselves to measuring. In accordance with aims-directed steering principles, outcome may thus become a more easily controllable phenomenon. An obvious association here is the influential international comparisons and rankings of educational performance at the lower educational levels (e.g. PISA; TIMMS). Is

the Bologna process taking higher education in this direction? To quote from a statement issued by the European Consortium for Accreditation (ECA) on the subject of the further development of quality assurance in the Bologna process:

Data collection and development of performance indicators should strictly adhere to the principles of transparency, readability and accountability of European education, thus allowing for measuring and comparing the strengths of institutions. (.....) Measuring the strengths of diverse institutions across borders will pose an entirely new challenge. To this end compatible instruments for both external institutional assessments and internal quality assurance systems will have to be developed. (ECA, 2009)

Serious attempts are now being made to investigate the possibility of launching a mechanism to assess – or measure – the learning outcome of higher education provision in a European context. OECD's AHELO project has exactly this aim but starts with an acknowledgement of the methodological complexities that are involved when national cultures and traditions have to be taken into account. OECD therefore approaches the task through an initial Feasibility Study:

There is currently considerable interest within institutional, political and scientific circles for measures of higher education learning outcomes, but uncertainties and doubts of some actors as to whether it is scientifically and operationally feasible to measure learning outcomes across HEIs of very different types, and in countries with different cultures and languages.

The main criteria to assess the success of the feasibility study is to provide a proof of concept that the various instruments considered can be applied in diverse institutional, cultural and linguistic settings with appropriate adaptations and yet provide valid, reliable and free-of –bias measures of student learning outcomes as well as indirect measures of higher education quality.

(OECD, 2009)

Leaving aside the question of how useful a measuring instrument would be, the document gives an indication of the complexity of such an operation, viewed from a methodological angle. At the same time it illustrates the interface between research and quality assurance. Quality assurance (and particularly *external* quality assurance) cannot possibly operate systematically with such a number of fine-tuned measuring instruments as the AHELO project envisages. Consequently, quality assurance must make less demanding knowledge claims.

But a focus on learning outcome will still present methodological challenges. Agencies and institutions will have to face the demand that the results of quality assurance should be 'evidence based'. It may turn out to be harder (or at least more burdensome) to find valid evidence of results/outcomes than of input factors. What will the documented 'evidence' of educational quality look like, if based on learning outcome?

A look around: Do we already see change?

What modifications should we expect in quality assurance to make it fit for a modified purpose? For a start, it may be interesting to see if there has been any impact on national policies and practice so far. A temperature check with a few well-established national agencies may serve as examples. Do we see modifications that indicate a real paradigm shift or will the exercise boil down to political rhetoric and an instance of 'the emperor's new clothes'?

The Swedish National Agency for Higher Education has published a new model for the next cycle of external quality assurance (2011 - 17) (Högskoleverket, 2009). It will be of the

programme type and is supposed to rest on three basic indicators: (1) *Intended LO and the assessment of students* has three sub-categories, all of them focusing on 'input' arrangements: (a) the 'constructive alignment' (Biggs and Tang, 2007) of input factors with the definition of intended LO, (b) the programme's labour market relevance and (c) the academic and didactic competence profile of the teachers. (2) *Learning outcome* tries to assess achieved learning outcome, mainly by means of repeat assessments of specimens of student work. (3) *Student experience and student influence* includes two surveys: a student survey will enquire about the students' experience of programme quality, while an alumni survey will test the programme's occupational relevance and the employability of the candidates.

The Danish model is also of the programme type. A new law on the accreditation of higher education (2007) has LO as a central concept¹. The law defines LO as one of four 'criteria columns', the other three being 'labour market demand', 'research base' and (3) 'organisation and delivery of the provision'. Demand is assessed via employer feed-back, while 'organisation and delivery' focuses on the correspondences between learning aims and outcome demands on the one hand and the design of the course on the other. The LO column assesses whether the programme's intended outcome is in accordance with the name of the provision and the relevant degree descriptors in the Danish Qualification Framework. It also assesses achieved learning outcome in terms of formal examination results (which are not reassessed).

NVAO – the Dutch-Flemish accreditation agency – have also modified their operational approach over the last few years, partly in order to bring in an LO orientation. The agency states that 'learning outcomes are the crux of NVAO's learning outcomes-oriented accreditation system' (NVAO. 2010). In this system, LO is referred to at three levels. The accreditation process will scrutinise the programme's definition of *intended LO* to see if it is in accordance with the Qualifications Framework and general academic expectations. The accreditation process will then assess the programme's *potential LO*, mainly by measuring up if the observed input factors are sufficient to enable students to achieve the intended LO. Finally, *achieved LO* will be assessed by evaluation panels who read examples of students' work as a re-assessment.

Current official documents of the British QAA (England, Wales, and Northern Ireland) describe the evaluation process and objectives without very explicit reference to the new Bologna orientation. Of course QAA's approach is institutional, and as such less directly adaptable to an LO orientation. Learning outcomes are the products of programmes, not institutions. But QAA has always had its evaluations firmly anchored in written documents containing definitions of quality standards at the programme level: their Academic Infrastructure (QAA, 2010) documents contain Frameworks for Higher Education *Oualifications*, where outcome qualifications are defined in terms of knowledge, skills and competencies. QAA Scotland share with the rest of the UK the Academic Infrastructure and the institutional approach but may still be mentioned as a particularly interesting case, not least because they are now generally regarded as one of the most enhancement-oriented agencies in Europe. The Scottish main approach is the so-called Enhancement-Led Institutional Review (ELIR) and it is noteworthy how the ELIR Handbook avoids explicit reference to learning outcomes. QAA Scotland highlights processes rather than outcomes, stressing the student learning experience – and the institution's ability to provide opportunities for a good learning experience – as their key concept. This somehow takes us

¹ Accreditation procedures are conducted by ACE Denmark (in universities) and EVA (in colleges of professional education). Both are bound by the same law but have developed slightly different sets of criteria.

back to the idea of higher education as a transformation process. It also takes account of the fact that learning outcomes depend on the learner as much as on the institution's provision.

These examples indicate that learning outcome orientation is very much on the agenda of national agencies but that procedural modifications so far tend to take place inside established evaluation formats. As could be expected, the adaptation of criteria and processes seem to have come furthest in those agencies that conduct external quality assurance at a programme level.

Some reflections and tentative assumptions

Reference and procedure

External quality assurance must follow defined standards or criteria (ENQA, 2009, par. 2.3). Such criteria must now be re-examined to see if they really reflect the new emphasis on learning outcome and its correspondence with the specifications in the qualifications framework. Standards and criteria must guide quality assurance processes towards the evaluation of how the students' attainment of learning goals is planned, facilitated, assessed and followed up. More specifically, it must assess whether the specified generic skills are really trained and tested in the programmes or whether they are just paid lip service to in course descriptions and otherwise taken for granted. The concept of educational quality as such will not change, but with a change in focus one must expect adaptations in the reference framework – and therefore also in the processes.

The new orientation directs us to the end of the educational process, begging the question if quality assurance shouldn't take its point of departure here. Provided that we can produce documentation of students' learning outcome that goes beyond formal grades (a crucial point!), we might imagine a process that starts with questions like: do the intended learning goals answer the requirements of the qualifications framework? What does the documentation tell us about to what extent the students' actually achieve these goals? Quality assurance may then work its way 'backwards' from the outcome stage into the programme's total design: its process factors, the competence of teachers, infrastructural elements and intake quality, assessing the way in which these factors do – or do not – facilitate the attainment of the defined goals. This could make evaluation processes more targeted and 'clues oriented' – and possibly less ritualistic.

Direct or indirect approach

However, the approach must (still) be *indirect* to a large extent, with assessments made on the basis of certain indications and assumptions. The alternative – i.e. a *direct* method – would imply one of two options: Either simply to trust the formal results that the students' final marks represent, or to create comprehensive systems of repeat assessments. Both approaches have serious drawbacks. Whereas trusting the formal results is problematic in view of what we know about disparities in assessing and marking practice, comprehensive use of repeat assessments would be burdensome and costly – and may still fail to address educational quality in any deeper sense. But most importantly, it would not increase our *understanding* of quality and would not contribute much to the other side of quality assurance: quality enhancement. So we must not lose input factors out of sight. Presumably, it is the educational process that brings about the aimed-for outcome and it is in the input factors of that process that adjustments will have to be made in order to improve learning outcome or correct failures that prohibit learning. With little or no information about the characteristics of input factors, institutions will be rummaging in the dark when looking for the right remedial measures, or constructive ways towards further improvement.

Still, the direct element poses a challenge. Quality assurance processes that take their point of departure at the outcome stage must necessarily rely on reasonably trustworthy documentation of what learning has actually been achieved or they will have no solid basis for their operations. We have already seen how some agencies have stepped up their efforts to assess outcome directly; at the institutional level an interesting development is described by Karl-Axel Nilsson (Nilsson, 2010) at the University of Lund in Sweden. In a scheme that distinguishes between 'quality assurance' and 'evaluation', the assessment of student work is a central element. To simplify somewhat, (direct) outcome assessment makes up the quality assurance part, while 'evaluation' mainly addresses the institution's effort and input.

A new hierarchy of quality assurance 'evidence'

As the relationship between input and outcome may take on a new dynamic, certain shifts may be expected in the hierarchy of input factors. One input factor that must assume greater importance is *assessment methods and formats*. While remaining a part of any course plan, they will also become more explicitly part of the quality assurance processes. In fact, student assessment is the point where input, outcome and quality assurance most conspicuously converge. Quality assurance must include a scrutiny of how precisely and comprehensively the students' achievement of intended learning outcomes is assessed. But also *the study plan as a whole* must receive increased attention – as a description of how the students' learning process is designed. To assess the level, coherence and progression of a programme in terms of the interrelationships between the qualifications framework, the specific learning aims, the descriptions of teaching/learning processes, the curriculum and the assessment methods will be a major task.

This means that quality assurance should renew its emphasis on didactic concerns. But a didactic orientation demands one further step. In order to transgress a simple 'assurance' function, quality assurance must work from an *understanding* of how learning actually comes about. It must go beyond plans and designs and on to the way in which the course design 'materialises' in learning situations and activities. In fact, one of the advantages of looking more critically at outcomes may be that more conscious efforts will be made to penetrate that 'black box' of the set learning situations to analyse how what is going on there actually furthers student learning. If the 'knowledge' that is extracted from such analyses is going to be more than impressionistic, random and anecdotal, quality assurance will have to operate on a very detailed level, and to deal with concepts and phenomena that are hard to describe, assess and compare in exact terms.

Implications

If this is a challenge, it also means that quality assurance, by putting its focus here, may become more economical, shedding some of its tendency to look upon every aspect of circumstantial or infrastructural phenomena as equally important. By concentrating on the essentials of the learning process, quality assurance may become slimmer and less bureaucratic. Key performance indicators will still indicate and explain, but on the whole quality assurance processes may become more discursive, 'qualitative' and analytic, *reflecting the very qualitative nature of learning outcome*. Winning this, something else is necessarily lost: aspirations to pass exact judgements (beyond simple recognitions) must be lowered. If this does *not* happen, evaluation by learning outcome may easily lapse into a reductionist, perhaps even 'symbolist' mode of 'counting quality' by (supposedly) exact measurements.

A reorientation along the lines sketched here will have (at least) two other important implications. One is that teaching academics will have to play more conspicuous roles in quality assurance. Discussing and evaluating educational quality is of course primarily an academic concern, not an administrative or political one. An approach that works along a *learning aims – process design – learning outcome* axis is by nature a didactic one and must involve the discipline community more than anyone else. This will provide a most needed corrective and supplement, filling an essential knowledge gap that system evaluations and students' course evaluations often leave open.

A third implication is that the relationship between programme and institutional, as well as between internal and external quality assurance should be re-considered. A more didactic orientation demands that attention focuses on the local (programme) perspective. Only at this level can you increase the emphasis on the enhancement of *actual learning* and make quality work more concerned with quality development, learning strategies and learning styles, as related to learning aims. Does this imply that external quality assurance must now be of the 'programme' type? Of course this is one possible answer. But like always before, this is also a question of trust – and of cost/ benefit assessment: will comprehensive external programme evaluations yield results that justify the use of resources? Some would question that. The institutional approach indicates another kind of shift: to see the balance tilted more in favour of internal quality work, making this more integrated with the teaching/learning processes. In order to achieve this, the institution will require a 'decentralised' engagement with quality work, involving the academic staff as main players. But the institution will also need an institutional quality management system to steer and monitor this work properly, and to record and analyse it in a systematic and transparent way. In this case, the role of external QA may be reduced to a simple (if robust) mechanism for recognition/accreditation and an overseeing function in relation to the institutions' internal quality work, preferably with a developmental perspective.

Possible follow-up questions:

- What should the documented 'evidence' of educational quality look like, if based on learning outcome?
- Is it a reasonable conclusion that quality assurance, when oriented towards learning outcome, must be more concerned with didactic issues (- and possibly less with macro performance indicators)?
- Should external QA agencies operate with clearly different procedures when dealing with (a) accreditation/recognition and (b) learning efficiency-oriented evaluations respectively? (If *recognition* is more concerned with inputs and capacities and can be more 'exact', whereas evaluations of actual learning outcome and its relationship to inputs deals with more 'extendable' phenomena.)

References:

• Biggs, J. and Tang, C. (2007): *Teaching for Quality Learning at University*, McGraw-Hill and Open University press, Maidenhead

- Bologna Working Group on Qualifications Frameworks (Copenhagen, 2005): A *Framework for the Qualifications of the European Higher Education Area*
- ENQA (European Association for Quality Assurance in Higher Education): *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (Helsinki, 3rd edition, 2009)
- European Consortium for Accreditation (ECA) (2009): Position Paper on the BFUG 'Bologna beyond 2010' Report
- Harvey, L. (2004 -9): Analytic Quality Glossary, Quality Research International
- Harvey, L. and Green, D. (1993): Assessment and Evaluation in Higher Education
- Högskoleverket (Swedish National Agency for Higher Education) (2009): *Rapport* 2009:25 R
- Nilsson, K.-A. (2010): *Direct Quality Assurance*. Evaluation Report no. 2010:257, Lunds Universitet, Sweden
- OECD (2209): Roadmap for the OECD Assessment of Higher Education Learning Outcomes Feasibility Study (2nd version, 11 June 2009)
- <u>www.nvao.net/Initial Accreditation.nl</u>
- <u>www.qaa.ac.uk</u>