Embedding Quality Culture in Higher Education Provision: The Cyprus case

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Abstract

As a result of the Bologna Process and other global developments in the area of higher education, the issue of quality has acquired key significance. Higher education institutions are called upon to embed quality culture in their education provision. This would enhance the trust societies put on them, make them more accountable, and result in higher autonomy for them. This paper focuses on the quality management of educational programmes in view of European and global developments in higher education and suggests various quality indicators. It is argued that embedding quality culture is necessary for safeguarding against minimum quality standards for academic and professional qualifications. It is also argued that quality, particularly with respect to higher education provision, is multi-dimensional, thus reducing or abstracting it to a single figure, as it happens with ranking systems, is unduly simplistic, can hide important information, and could be misrepresentative of the true situation, both in a positive or negative way. As a test case, the author describes the quality scene for higher education in Cyprus.

1. Higher Education in Cyprus

Cyprus has a relatively short history of higher education (HE). The country's first university, the University of Cyprus, admitted its first students in 1992. Now there are six universities, three state and three private universities. The private universities were established in 2007 and presently operate under probationary license. According to the last report on the progress of the Lisbon strategy [16], amongst the 27 member states, Cyprus has the highest percentage (29.7%) of population in the age group 25-64 with HE qualifications. In addition, Cyprus, Malta and Ireland, are the three member states with the highest progress in the period 2000-2007 regarding the percentage of their population with HE qualifications. This is considered a central progress indicator.

Given the above statistics (short history of HE, and high percentage of population with university qualifications) it can be easily seen why Cyprus has a high proportion of its students going to other countries for their studies (vertical mobility). At present, more than half of its approximately 35,000

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students are studying at universities abroad. Government policy, though, aims to reverse this situation, both by reducing the migration of students to other countries, and by attracting international students. The overall goal is to convert Cyprus to a regional centre for the provision of quality HE.

2. European and Global Developments

The Bologna process has succeeded in setting into motion major reforms in the HE systems of Europe with the purpose of harmonizing these systems, while keeping and strengthening their diversity [4]. Bologna has put quality issues centrally on the European agenda as the realization of the Bologna goals depends critically on quality. The European standards and guidelines for quality assurance [7] represent an important outcome of the Bologna process, followed by the establishment of the European Quality Assurance Register [15]. In 2006 the E4 partners (EUA, ESU, ENQA and EURASHE) launched the European Quality Assurance Forum, an annual event (that this year, its 3rd run, attracted over 500 participants from all continents) that aims to cultivate dialogue in quality assurance, with all stakeholders, and to encourage research focusing on quality assurance in HE [17].

Both in Europe and globally the pressure to increase HE capacity is high. Europe talks about knowledge-based societies and economies [9]. The Bologna process rightly stresses the social dimension and calls for actions at national level for increasing access, attendance and successful completion of HE studies from underrepresented groups, thus enhancing social cohesion. Bologna also stresses the need to change from an input-based, teaching-centered educational philosophy to an output-based philosophy having the learner at the centre of the process; this calls for a redesign of curricula based on learning outcomes (knowledge, skills and competencies that a learner is expected to acquire/grasp at the end of a learning process) [1,2,11,12]. The question put to a graduate would no longer be "What have you done to obtain the qualification?" but "Now that you have obtained the qualification, what can you do?"

Globalization [14], transnational education provision, joint degrees, higher competition for international students, changes in demographics, reductions in traditional students, the perceived enlargement of adult learners [8], flexible learning pathways [3] and the call to universities to become more inclusive and responsive, i.e. to become lifelong learning universities [5], all add to the HE scene in Europe and world-wide. Such developments are welcome provided that quality is not adversely affected [13]. Thus, the management of quality should be a strategic priority for HE institutions. In addition, countries should safeguard against the commercialization of HE and the easy acquisition of qualifications, as often such developments do not differ substantially from degree mills that unfortunately in today's realities represent an ever growing and thriving business.

3. Internal Quality Management as a Strategic Goal for Self-Awareness

University rankings and league tables are quite fashionable these days, causing varied impressions [10,18]. Such approaches have been criticized, both methodologically and otherwise and debates are going on as to their true value for institutions and other stakeholders. Such rankings invariably compute a score for each institution based on a weighted sum of the chosen numerical indicators. Thus a complex situation is reduced to a single number. This abstraction can hide important information and could misrepresentative of the true situation, both in a positive or negative way (it is not the case that everything is quantifiable and whatever indicators and associated weights are chosen reflect certain biases). However, rankings can serve a useful purpose if they aim to compare comparable entities; they do not distract institutions from their missions and do not cause adverse external effects, e.g. reductions in state funding. In other words rankings should be placed and interpreted in the right context and from the right perspective.

Quality, particularly with respect to HE provision, is multi-dimensional. The internal management of quality in a HE institution should be a strategic goal of the institution with the sole purpose of enhancing its self-awareness as to how well it meets its mission, what needs to be improved and how. It is important to stress that in order to succeed in creating the appropriate internal quality culture, the processes that implement the quality assurance (QA) mechanisms must be incorporated in a seamless fashion, so that they become fundamental and integral aspects of the processes they evaluate. This way they are not conceived as additional, unnecessary overhead. Otherwise, the whole attempt could defeat itself. In particular, the raw data for the computation of the chosen quality indicators should be possible to acquire in a way that is not causing extra effort on the part of the personnel involved.

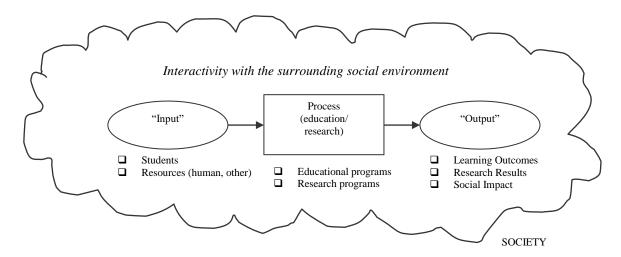


Figure 1 High Level Conception of Education Provision and the Conducting of Research

HE provision and the conducting of research are interactive processes that influence, and are influenced by, the social environment (see Fig. 1). The internal management of quality makes the internal processes of an institution more transparent and brings to the surface the obstacles and difficulties that the institution is facing. Moreover, the "output" of the institution becomes a direct function of the utilization of its available resources. This way the

institution becomes more accountable to its society, which in turn strengthens the confidence of the society in the institution, thus enhancing its autonomy.

The internal management of quality should aim to strengthen the university's self-awareness regarding its educational and scientific provision. Self-awareness implies the detection of problems and weaknesses through the application of objective mechanisms of diagnosis. Self-awareness is a precondition to improvement. Thus, the QA processes, lead to actions for improvement. The effectiveness or not of such actions will transpire in due course, by feeding back the relevant data/observations into the two step cycle "Diagnosis-Rectification". Consequently the application of the relevant QA processes and actions should be on a continuous basis (see Fig. 2) in order to succeed in sustaining quality enhancement.

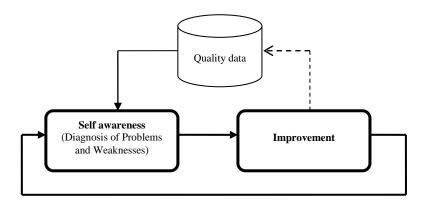


Figure 2 Continuous Enhancement of Quality through a Repetitive Process of Objective Self-awareness and Improvement

4. Learner-Centered Education Provision

Under a learner-centered philosophy an educational programme, both as a whole and its individual components/modules must have clearly defined learning outcomes [1,2,11,12]. In addition, the teaching and learning methods used should be adequately supported with the necessary learning resources and should be appropriate for the particular learning outcomes. Moreover, continuous assessment is strongly advocated, encompassing different types of assessment both for learner feedback and evaluation. The assessment methods should be used in a consistent and transparent way and should be appropriate for assessing the successful attainment or otherwise of the given learning outcomes. Thus a comprehensive internal quality management strategy for educational programmes should aim to examine all the above dimensions of a learner-centered educational system.

With respect to student populations, there is a need to support different types of students and to allow for flexibility in learning and different learning pathways. Meeting the goal of social cohesion implies a diverse student population with respect to backgrounds (educational, economic, etc). In order for students with diverse backgrounds to have an equal opportunity in successfully completing their studies, the institution should be in a position to give them the necessary support learning-wise, and otherwise. Meeting the

goal of establishing and sustaining a knowledge-based society and economy, implies that gradually adult learners will become a significant proportion of the student population of HE institutions [8]. Adult learners have different needs and demands. Again quality-based education provision should cater for their needs in an appropriate fashion and provide the relevant support mechanisms. A comprehensive internal quality management strategy should therefore encompass the dimensions relating to the diversity of student populations.

The above issues are briefly mentioned in order to show that HE provision is a complex multi-dimensional process. As such its quality management is an equally complex process dealing with a number of both qualitative and quantitative indicators.

5. The Quality Scene for Higher Education in Cyprus

All HE institutions in Cyprus are strongly encouraged to develop and apply effective internal quality management strategies. Legislation is also under way for the establishment of a National QA Agency. This legislation encompasses the European standards and guidelines for QA [7] regarding external QA, internal QA and the QA of the Agency itself. Moreover this legislation covers transnational education provision.

The quality management of the education provision of the three private universities is particularly extensive given that for the first five years they operate under probation. The quality of their programmes will be a key criterion for deciding whether to grant them proper license of operation. The criteria/indicators used for the internal and external evaluation of the programmes of private universities are given in Table 1. It is noted that special emphasis is put on the implementation of the requirements of the European Credit Transfer and Accumulation System (ECTS) (criterion 9) [6].

Table 1: Criteria/Indicators for the Quality Management of Programmes of Private Universities in Cyprus

- 1. Aims, objectives and overall identity of programme
- 2. Student intake
- 3. Admissions criteria and admissions process
- 4. Target audience (home and international students)
- 5. Structure of programme
- 6. Learning outcomes (overall programme, individual modules)
- 7. Practical/industrial component (if applicable)
- 8. Project work (dissertations, group work, theses)

- 9. Implementation of ECTS requirements:
 - a. Distribution and justification of credits
 - b. Learning/teaching methods
 - c. Student evaluation (methods, different types, continuous evaluation or not, student feedback, multiple examiners, external examiners, etc) and its degree of transparency
- 10. Generic skills and competencies that the programme aims to give to the students
- 11. Research-related aspects of programme
- 12. Internal mechanisms for evaluating the quality of the programme and the student and staff satisfaction, and the adequateness of these mechanisms
- 13. Internal procedures for reviewing the programme
- 14. Relation of programme with other programmes of the university
- 15. Impact of the programme
 - Societal needs covered by the programme (perceived/actual employability of its graduates at home and abroad)
 - Scientific impact of the programme (locally and elsewhere)
- 16. Learning Resources supporting the Programme
 - Programme Coordinator
 - Other teaching staff
 - Other learning resources:
 - a. Laboratories (space, equipment, etc):
 - b. Library resources (text-books, scientific journals, electronic databanks)
 - Student support for covering foundational gaps (language problems, relevant background) and/or learning difficulties
 - Additional support to students with special needs

Presently, state universities are free to select whatever indicators they feel are appropriate for managing the quality of their programmes. Tables 2-4 give some example indicators for first, second, and third cycle programmes respectively, that could be potentially used.

Table 2: Potential Indicators for 1st Cycle Programmes

- 1. Student intake (student preferences, problems faced by students from special categories)
- 2. Support/integration mechanisms for new students, particularly those from special categories
- 3. Functioning of the institutions of academic tutors and teaching assistants
- 4. Demand vs supply of free elective courses
- 5. Retention and failure rates for programme and its course modules

- 6. Employment of graduates (locally, abroad, in jobs relevant or not to their studies)
- 7. Graduates following further studies (same university, other university of Cyprus, abroad, in an area relevant to their undergraduate studies or in a different area)

Table 2: Potential Indicators for 2nd Cycle Programmes

- 1. Criteria for deciding student intake
- 2. Student intake (satisfaction of admission criteria, quality of 1st degree, knowledge of languages, industrial or other experience, number of applications, percentage of applicants who accepted the offer)
- 3. Percentage of working students
- 4. Percentage of international students
- 5. Percentage of students who obtained their 1st degree from the same university
- 6. Specialization aspects of the programme and how they are catered for
- 7. Thesis supervision
- 8. Utilization of qualification for further studies or employment

Table 3: Potential Indicators for 3rd Cycle Programmes

- 1. Student intake (quality of admission qualifications, applicants with top grades, number of applications, percentage of applicants who accepted the offer)
- 2. Percentage of working students
- 3. Percentage of international students
- 4. Percentage of students who obtained their admission qualifications from the same university
- 5. Percentage of students admitted directly from their 1st degree
- 6. Thesis supervision
- 7. Student progress monitoring mechanisms
- 8. Transferrable skills
- 9. Award and failure rates
- 10. Utilization of doctoral qualification for academic/research/other employment

Whatever quality indicators are decided by some institution, in addition to any quality indicators that the National QA Agency will decide for central accumulation and processing should be collected in a consistent and transparent fashion and be made available to all stakeholder. This process of data collection and analysis from the point of key quality indicators would result in continuously enhancing self-awareness, a necessary precondition to change and improvement.

6. Conclusions

The paper discussed quality management of educational programmes in view of European and global developments in HE, using the Cyprus case as an example. Cyprus has a very short history of HE, although amongst the 27 European member states it has the highest percentage of population in the age group 25-64 with HE qualifications (29.7%). Embedding quality culture is necessary for safeguarding against minimum quality standards for academic and professional qualifications. The paper has argued that quality, with respect to higher education provision, is multi-dimensional, and thus a comprehensive internal quality management strategy should aim to address

and analyze all dimensions. In particular it should focus on the resources supporting the learning process and the diversity of student population that is likely to increase in order to meet the goals of social cohesion and of sustaining a knowledge-based society and economy. As a result, the category of adult learners is expected to increase (requiring universities to become lifelong learning universities) while the category of traditional learners is expected to become more diverse if the goal of increasing participation from underrepresented groups of society is met.

References

- 1. Adam S., "An introduction to learning outcomes: a consideration of the nature, function and position of learning outcomes in the creation of the European Higher Education Area", EUA Bologna Handbook, Article B 2.3-1, Raabe Academic Publishers (Berlin), 2006.
- 2. Adam S., "Learning outcomes current developments in Europe: update on the issues and applications of learning outcomes associated with the Bologna process", Bologna Seminar: Learning outcomes based higher education, the Scottish experience, 21-22 Feb 2008, Herriot-Watt University, Edinburgh, Scotland.
- 3. Adam S., "Why is the recognition of prior experiential learning important and what are the national and institutional implications for this for lifelong learning?", Bologna Process Seminar: New challenges in recognition: the recognition of prior learning, 25-26 Jan 2007, Riga, Latvia.
- Bologna Process Stocktaking London 2007 (ttp://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/WGR2007/Stocktaking _report2007.pdf)
- 5. Davies P. and Feutrie M., "University lifelong learning to lifelong learning universities", EUA Bologna Handbook, Article B 1.6-9, Raabe Academic Publishers (Berlin), 2008.
- ECTS Guidelines (2007): European Credit and Accumulation System, Directorate-General for Education and Culture (http://ee.europa.eu/education/programmes/socrates/ects/guide_en.html).
- 7. ENQA (2005): European Association for Quality Assurance in Higher Education, Standards and Guidelines for Quality Assurance in the European Higher Education Area (http://www.enqa.eu/files/ESG_v03.pdf).
- 8. EUA Bologna Handbook, 8th Supplement devoted to "Flexible Learning", June 2008, Raabe Academic Publishers (Berlin).
- 9. Forment E., "Quality assurance and the Bologna and Lisbon objectives", EUA Publication: Embedding quality culture in higher education: a selection of papers from the 1st European Forum for Quality Assurance, pp. 11-13, 2007.
- Hazelkorn E. (2008), "The Emperor has No Clothes? Rankings and the Shift from Quality Assurance to the Pursuit of World-Class Excellence", Proc. Third European Quality Assurance Forum 2008 (EQAF 2008), Corvinus University of Budapest, Hungary, 20-22 November 2008 (http://www.eua.be/fileadmin/user_upload/files/QAForum_2008/Plenary_V__ Hazelkorn.pdf)
- 11. Kennedy D., Hyland A. and Ryan N., "Writing and using learning outcomes: a practical guide", EUA Bologna Handbook, Article C 3.4-1, Raabe Academic Publishers (Berlin), 2006.

- 12. Keravnou-Papailiou E. (2007), "Implementing ECTS at the University of Cyprus", EUA Bologna Handbook, December 2007, article C 3.3-2 (pages 1-22), Raabe Academic Publishers.
- 13. Keravnou-Papailiou E. (2008), "Flexibility through Learning Outcomes: Implications for Quality", Proc. Third European Quality Assurance Forum 2008 (EQAF 2008), Corvinus University of Budapest, Hungary, 20-22 November 2008 (http://www.eua.be/events/quality-assurance-forum-2008/themes/).
- London Communiqué, Towards the European Higher Education Area: responding to challenges in a globalised world (http://www.cicic.ca/docs/bologna/2007LondonCommunique.en.pdf).
- 15. MacMahon B. (2008), "Update on the European Quality Assurance Register (EQAR)", Proc. Third European Quality Assurance Forum 2008 (EQAF 2008), Corvinus University of Budapest, Hungary, 20-22 November 2008 (http://www.eua.be/fileadmin/user_upload/files/QAForum_2008/Plenary_IV_-_MacMahon.pdf)
- 16. Progress towards the Lisbon objectives in education and training: indicators and benchmarks, Commission Staff Working Document, 2008.
- 17. Third European Quality Assurance Forum home page (http://www.eua.be/events/quality-assurance-forum-2008/)
- Vettori O. (2008), "Universities and Rankings The Multi-Purpose Game", Proc. Third European Quality Assurance Forum 2008 (EQAF 2008), Corvinus University of Budapest, Hungary, 20-22 November 2008 (http://www.eua.be/fileadmin/user_upload/files/QAForum_2008/Plenary_V__ _Vettori.pdf)