

## Development on Quality Assurance of Teaching and Learning

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**Abstract:** While universities have always been concerned with the improvement of the quality of their teaching and learning, their efforts have not always been as systematic as they could be nor as visible and accountable as they could be. The issue of quality assurance and quality enhancement is receiving greater attention worldwide. Teacher preparation over the past years has increasingly become the focus of many universities due in part to numerous reform initiatives and as the result of attention generated by many universities. The daunting task of preparing a cadre of qualified new teachers involves a number of considerations. This article presents a discussion of two recent efforts in teaching and learning, analyzes some major features of the quality system for teaching and learning, put forwards general principles for quality assurance in three parts, namely project approach, assignment of responsibility and reporting. Then it specifies quality assurance of individual courses and the benefits of this scheme, in addition the view of teaching and learning underlying this scheme is that good teaching and learning in context dependent and continuously improvable.

**Keywords:** quality assurance; teaching; learning; principles

### 1. INTRODUCTION

Learners learn what teachers intend to teach is a Qualitative Teaching. Quality Assurance Teaching gives more stress on the effect of teaching. It is learners-based teaching and its effect can be measured by various ways, and in turn, can be used for further teaching. It is the product of taking precautions of the pre-teaching stage, teaching stage and the post-teaching stage (Prosser, M. 2003).

At the pre-teaching stage, a teacher has to think of 1) the age of the students; 2) time allocation; 3) contents; 4) methods to be chosen; 5) AV aids to be selected; 6) illustrations to be given; 7) atmosphere to be created; 8) points to be given stress; 9) questions to be asked; 10) self-learning part and so on. At the teaching stage, a teacher has to 1) awake the previous knowledge of the students; 2) introduce the topic; 3) use selected method; 4) create necessary atmosphere; 5) give appropriate illustrations; 6) evaluate the

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topic taught. And at the post-teaching stage, 1) feedback about the teaching has to be sought; 2) think of the perceptions collected about teaching; 3) fill the gap between the different perceptions; 4) think of the perceptions collected and improve the further teaching. This article draws attention towards quality assurance of teaching and learning in general principles of different stages.

## **2. CONSTITUTION OF TEACHING AND LEARNING**

The issue of what constitutes high quality teaching and learning is one which is of prime importance in the development of quality assurance systems, and one which is often not explicitly addressed. There is a growing consensus that high quality teaching is not just about high quality presentation of content, nor just about the implementation of high quality teaching skills (Schalock, 1999). High quality teaching is about improving student learning. Assuring quality of teaching based on this concept of quality teaching is about keeping a focus on how and what students are learning, and how this can be improved ( Martens, 2004). It is fundamentally about affording a context in which high quality learning is possible and is encouraged. As noted by Ramsden (2002), fundamental to this view is that good teaching is *context-related, uncertain* and *continuously improvable*. To assure the quality of teaching based on this concept of teaching and learning will need to ensure that the system is open enough to allow for variation between, for example, disciplines, years of study, compulsory and elective subjects. It will need to take into consideration that the ways taken to improve teaching and learning are likely to be uncertain in the outcomes and consequently require a continuing focus on improvement.

Any system of quality assurance of teaching and learning that takes as its point of departure that good teaching is about affording high quality student learning will need to explicitly take account of these issues.

## **3. MAJOR FEATURES OF THE QUALITY SYSTEM FOR TEACHING AND LEARNING**

- **Planning:** Annual and longer-term planning processes are a foundation for the quality of teaching and learning.
- **Assurance:** Procedures and practices, both periodic and continuous, are in place at Departmental, Faculty and University levels to report and review to assure the quality of teaching and learning.
- **Responsibilities:** Responsibility for teaching quality is shared by individual staff members, teaching teams, Academic Heads, Deans of Faculty and the Deputy Vice-Chancellor (Academic). University responsibility is exercised through the Teaching and Learning Quality Committee, reporting to Education Committee.
- **Outcomes:** Teaching and learning quality is judged ultimately by student learning outcomes.
- **Staff support:** The University offers support to each member of teaching staff to be as effective as possible.
- **Student support:** The University offers a suite of services and facilities to enable every student to be an effective learner, and to achieve the appropriate Graduate Profile.
- **Student input:** Student involvement and feedback concerning teaching and learning quality and improvements is a central feature of the University as a student-centered institution.

## **4. GENERAL PRINCIPLES**

### **4.1 Project approach**

To prevent the teaching activities from becoming a continuous repetitive routine, the annual implementation of each program of study and each course is regarded as an independent project with a defined start and end. The practical organization must be adapted to the complexity of the course/program and the number of contributors. When more than one person takes part in the teaching, a project group is established. The project group includes those who have an active responsibility for the teaching of the course (Ramsden & Margetson, 2000). The group is headed by the course coordinator. If the course coordinator is alone in the implementation, he or she performs the relevant tasks of the project group. In addition, a reference group is to be created with a selection of students. The project phases are completed every time the course is taught or the program is implemented, cf. the model:

- In the planning phase, the project objectives of formulated methods are specified.
- In the implementation phase, regular meetings are held in the project group and reference group to check that the progress and direction are in accordance with the plans.
- When the course has been completed, the outcomes and achievement of objectives are assessed so that improvements and adjustments can be made.

A key aspect of the quality activities is to ensure academic and educational renewal and development. This is an important responsibility for faculties, the management of study program and departments.

### **4.2 Assignment of responsibility**

The responsibility for the introduction of the quality system and for adapting it to local conditions within the approved framework is a line responsibility, that is, a responsibility for deans, faculty directors, and heads of departments (Rakes, T. 2004).

The responsibility for following the routines is assigned to the individual course coordinators and to the management of the study program for each program to study. To achieve the objectives described in curricular and semester plans, the study program councils must have substantial influence on implementation and follow up. The immediate line manager is responsible for following up performance of the routines, and must also ensure that corrective measures are initiated when nonconformities in quality are revealed.

### **4.3 Reporting**

The standards and criteria against which quality is measured – which are defined in the planning phase – are to be published in the curricula and semester plans. Performance of the quality assurance routines is documented in a documentation database. No plans have been made for underlying units to produce outcome reports beyond the quantitative data that other systems can already produce at the various management levels.

The objective of the quality assurance is not control, but development and improvement. Each level and each unit evaluates the factors that it can influence itself (Esterbrooks, S.R. Harper, C., Owens, L., & Nichols, T. 2000). Reporting is to be submitted to and dealt with by the parties that it concerns. Quality is not achieved through final inspection, but through well-established routines and a quality-conscious culture.

On the basis of its legitimate needs in relation to criteria, the top level must be able to generate reports showing whether the quality assurance has been performed in accordance with the requirements in the

system. To enable monitoring of the trend in quality over time, data may be retrieved from the documentation database to show, for example, the use of various teaching methods and forms of assessment.

## **5. QUALITY ASSURANCE OF INDIVIDUAL COURSES**

### **5.1 Planning**

In the planning phase, the objectives for the course are to be formulated and the methods are to be determined. The results from the planning phase are documented in the curriculum and semester plan. In addition, the support system will need to receive orders from the planning phase within given time limits. The time aspect is important in this phase, and must be resolved with the support system and any other participants. The semester plan is to be communicated to the students.

#### **Course coordinator**

The head of department/faculty management is to ensure that each course has a course coordinator. The course coordinator is responsible for quality assurance of the course in accordance with the regulations. The course coordinator convenes meetings with the project group.

#### **Objectives for the course**

All courses are to have a clear description of the objective of the course. Learning objectives are to be specified as:

- Product objectives: knowledge, skills and attitudes
- Process objectives: that is, how the student should benefit from the work method, for example, by developing a capacity for critical thinking or learning a particular study technique.
- Production objectives in the form of the number of credits or graduates.

#### **Scope of work**

To create parity between credits in different courses and determine a reasonable workload for the full-time student, the work volume in the individual course is to be standardized. The basis for the planning is to be a workload corresponding to 30 working hours (gross) per credit. The point of departure for the calculation is average time that it is assumed a student will need to achieve the learning and process objectives in an appropriate way.

The calculated workload is to cover all activities related to the course, such as:

- lectures
- exercises
- laboratory work
- seminars
- training in methods
- excursions
- fieldwork
- various written assignments, such as group assignments
- artistic performances/exhibitions
- project work
- self-study
- final examination and other assessments

The distribution of the calculated workload between the various learning activities within the course is to be described.

### **Prerequisites**

The curriculum must communicate the prerequisites that the student needs in order to be able to complete the course.

### **Academic context**

The course must be assessed in the context of other courses to ensure reasonable progress for the student. The management of the program of study is responsible for establishing the relationship between the courses in the program (Ingersoll, R.M., 2005).

The course is to be rooted in research that is, the teaching is to be based on existing knowledge within the discipline in that it includes and communicates the results of its own or others' research.

### **Capacity and resources**

The program is to be adapted to the resources available in collaboration with the head of the department and the management of the study program. The course coordinator takes responsibility for reporting staffing requirements such as the need for technical staff, teaching assistants, etc. When staffs are allocated, the course coordinator assigns them to the teaching schedule.

### **Teaching method**

The semester plan specifies and describes the teaching activities included in the course, which activities are compulsory, and the schedule for the various activities. The course coordinator reports needs for infrastructure as well as teaching materials and media to the department administration, library, bookshop, Technical Division, etc. The time limit for such feedback is to be arranged with the support system.

### **Form of assessment (examination)**

The form of assessment is to be adapted to the objective of the course. The assessment is an integral part of the learning process (Pollit, C. 1998).

Testing of the students' skills and knowledge is to give them an opportunity to demonstrate an understanding of relationships and a capacity for critical reflection, including reflection on their own attitudes.

In the choice of the form of assessment, the following factors must be taken into account and conveyed:

- the academic requirements that apply
- the time and duration of the assessment
- whether the assessment is to be individual or group-based
- which aids are allowed

### **Learning process**

Staff need to consider how the course arrangements can best be adapted to ensure an effective learning process for the students. Elements in such an assessment will be:

- academic progress
- time usage
- choice of various educational methods

## **5.2 Implementation**

### **Project meetings/follow-up meetings**

Follow-up meetings are to be held to ensure that the progress and direction comply with the planned objectives. The purpose is to be able to identify nonconformities rapidly to enable the necessary corrections along the way. Meetings are held as frequently as needed, but at least once per semester. If necessary, the objectives established in the semester plan can be adjusted in the light of the experience gained. The meetings are conducted with reference groups of students and, for example, teaching assistants, technical staff, and course lecturers.

### **Continuous evaluation**

An evaluation system is to be drawn up in order to obtain feedback from the students along the way (Maxson & Maxson, 2002). The scope and method are to be adapted to the course. The reference group/representatives of the students participate in the evaluation. The aim of continuous evaluation is to evaluate the extent to which the teaching process is yielding the desired outcomes. Continuous evaluation creates opportunities for to make improvements immediately. Such evaluation can also generate ideas and innovative development that are not realized immediately, but are taken care of and implemented in the next project, that is, the next time that the course starts. The quality system includes a set of standard tools. At regular intervals, and at least every third year, a more extensive evaluation is to be conducted. This may be included in a larger program evaluation.

### **5.3 Improvement and adjustments**

When the course has been completed, the person with the academic responsibility is to assess whether the objectives for the course have been achieved.

The head of the department/line manager is to ensure that evaluation and assessment of results takes place, and is responsible for the academic and educational standard of each course. To ensure that experience is preserved, that reflection on outcomes takes place, and that this results in continuous improvement, the results of evaluation and measurement must be followed up through an action plan if necessary. The action plan is to focus on both academic and educational aspects. The head of the department/line manager is responsible for following up and arranging further development of the teaching staff. Teaching and academic guidance is to be made available to the teaching staff as needed.

## **6. BENEFITS OF THE SCHEME**

The scheme has the following benefits. All subjects are consistently reviewed and enhanced. The central activity of the system is the written documentation of a context related review of various aspects of the subject, done by the person(s) able to reflect and interpret the student generated data: the coordinator, or teaching team. The suggestions for improvement contained within the report will be acted upon on several levels: (1) by the teaching team, (2) by the School and (3) by the Faculty. Schools by filing these reports every year have documented evidence that they regularly review and enhance all subjects. This evidence can be used for the purposes of school reviews, curriculum reviews, budgeting and other decision making processes. Individual staff member may, if they wish, use this evidence in their own career enhancement as part of teaching portfolios. The flexibility of the scheme allows for the incorporation of discipline specific needs and situations and thereby prevents as far as possible the scheme becoming irrelevant to the actual purpose, i.e. enhancement of teaching and learning. Because the university-wide scheme acts as a standard of the process, the school-based quality assurance schemes are enhanced and improved. The design of a specific university-based quality assurance scheme after some years of experiencing the University-based scheme is a process which universities and Faculties can use to shape and develop the awareness of their staff of their approaches to learning and teaching.

## **7. CONCLUSION**

In conclusion, we wish to reiterate the importance of having an explicit view of what constitutes good teaching and learning and an explicit view of the underlying approach taken in assuring the quality of teaching and learning. It may be worth noting here that the principles underlying the development of the quality assurance scheme also underlay the development of University's confidential system for student

evaluation of teaching, and the evaluation of teaching for the University's promotion system. The academic development unit has attempted to develop a coherent structure for each of these forms of evaluation and quality assurance of teaching and learning. The view of teaching and learning underlying this scheme is that good teaching and learning is context dependent, uncertain and continuously improvable. It is not something which can be enhanced through a standardized procedure of student evaluation.

## REFERENCES

- Esterbrooks, S.R., Harper, C., Owens, L., & Nichols, T. (2000). Preventing returns on teacher warranties and guarantees. *The Teacher Educator*, 35(4), 47-63.
- Ingersoll, R.M. (2005). The teacher shortage: A case of wrong diagnosis and wrong prescription. *NASSP Bulletin*, 86, 16-31.
- Martens, E. (2004). Quality Assurance and Subject Evaluation for the Reflective Practitioner. Innovations and Learning in Education. *The International Journal for the Reflective Practitioner*, 21, 28-34.
- Maxson, R.C. & Maxson, S.P. (2002). No-fault teacher education. *Phi Delta Kappan*, 83(5), 414-416.
- Pollit, C. (1998). The politics of performance assessment: Lessons for higher education? *Studies in Higher Education*, 12, 87-98.
- Prosser, M. (2003). Phenomenography and the Principles and Practices of Learning. *Higher Education Research and Development*, 12, 21-31.
- Ramsden, P. (2002). *Learning to Teach in Higher Education*. London: Routledge.
- Ramsden, P., Margetson, D. (2000). *Recognizing and Rewarding Good Teaching in Australian Higher Education, Final Report*. Canberra: Australian Government Publishing Service.
- Rakes, T. (2004). *Quality assurance*. Paper presented at the Annual Conference of the Southeastern Association for Employment in Education, Memphis, Tennessee.
- Schalock, D.H. (1999). The central issue in teacher warranties: Quality assurance for what? *Journal of Teacher Education*, 38, 52-58.