Internal Quality Assurance in Higher Education Institutions

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IQA-4-Africa

From Pan-African Policy to Practice

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Preliminaries

This is an introductory text to the following screencasts in the cinema of the topic Internal Quality Assurance in Higher Education Institutions:

1. What is Quality in Higher Education?
2. Quality Assurance and Quality Management
3. Internal Quality Assurance (IQA) Models – ISO, TQM, EFQM
4. The CORE model: A Specific Concept for Quality Management at Higher Education Institutions
5. Lessons Learned: What to Think About When Starting IQA?
6. QA and Strategy – The Approach of WU Vienna (Case Study)

The text is not a complete summary of the information given in the screencasts. It can introduce you to the respective topic and help you to remember the key facts later. You can make use of the full potential of the learning material and have the most fruitful learning experience, if you watch the respective screencasts in the cinema and work on the reflective questions, which you find at the end of this document.

Further reading to deepen your knowledge can be found in the bookshelf of the topic *Internal Quality Assurance in Higher Education Institutions*. Material for the transfer from theory into practice like worksheets, templates, etc. can be found in the toolbox of the topic *Internal Quality Assurance in Higher Education Institutions*.

All material is part of a compendium that was developed for the HAQAA2 Training Course IQA-4-Africa – From Pan African Policy to Practice.

Keywords

Quality, PDCA, Donabedian's theory, ISO, EFQM, TQM, Quality Assurance, Quality Management, CORE-concept, Higher education

Expected Learning Outcomes:

On successful completion of the material *Internal Quality Assurance in Higher Education Institutions*, you should be able to:

- explain how quality in higher education can be defined;
- differentiate between basic concepts of quality assurance and decide about which ones you would like to learn more in order to find out which one best suits your institution;
- analyse the status quo of quality assurance of your institution in order to find out which elements you first would like to improve;
- develop ideas on how you could start with implementing QA activities and a QA system at your institution.

1. What is Quality in Higher Education?

Intuitive Approach

If you want to help a friend to find a study programme suitable for his or her needs, you will intuitively know what to say about your university (and probably also about others). You will most probably talk about the teaching staff: Are they enthusiastic about their subjects? What is their qualification? Do you know successful alumni? Or do you know anything about ranking positions of the university? Maybe you will also compare the infrastructure or specific technical equipment: Are lecture halls appropriate for the number of students? How are the laboratories equipped? Is student accommodation on campus conducive?

This practical experience shows that you do have an intuitive idea of various features that characterise the quality of a Higher Education Institution. However, if we try to define quality itself, without just offering examples for high or low quality, we notice that "quality is a slippery concept", as Harvey and Green (1993) put it in a very inspiring overview article on quality definitions in Higher Education. As we have already seen in the first paragraph,

- quality is complex: It concerns a huge variety of criteria.
- And, of course, it is relative: Depending on the criterion you choose and how you weigh it, you will probably come to different results.
- And as different stakeholders (and individuals) may put different emphasis on different criteria, quality is also relative in a second dimension: In the end, quality "lies in the eye of the beholder" (Harvey & Green 1993; Brockerhoff et al. 2017).

Different perspectives on quality in Higher Education

Let us now dive a bit deeper into the different approaches to quality. Harvey & Green (1993) describe five concepts:

- quality as exceptional (surpassing implicit standards),
- quality as perfection (zero defects culture, meet specifications),
- quality as fitness for purpose (degree to which a goal is met, focus on effectiveness),
- quality as value for money (focus on efficiency and accountability),
- quality as transformation (enhancement, empowerment, change).

Most of these approaches can be applied to different aspects of quality in Higher Education, for example to study programmes or courses, to faculties or the whole university, to lectures or students. Therefore, following van Kemenade et al. (2008) we suggest that when it comes to quality we always try to answer the following three questions:

- **Object:** What are we talking about, e.g. teaching or research, a specific faculty or the whole university?
- **Standard:** Which criteria are to be taken into account, e.g. with regard to a study programme: the duration of the programme, the drop-out ratio or the employability of the alumni? Are there any relevant benchmarks that we want to apply to our object?
- **Subject:** Who is the one that defines the criteria? Who judges about the quality of this specific study programme or course, e.g. the students or a group of scientific peers?

2. What is Quality Assurance, What is Quality Management?

Now, we will combine our first approach to quality with a basic concept of management. The term *management* again can have different meanings, but luckily the variety is smaller compared to *quality*. Management on the one hand can be understood as a structural element of an organisation (with managers being the directors of an organisation resp. an organisational unit), e.g. the rectorate of a university.

Seen from a functional perspective on the other hand management can be defined as the activities carried out by the management (team). There are different opinions and schools regarding the definition of these activities or management processes. Depending on the approach, a management process can be divided into five, seven or even more steps. However, usually the following elements are always included:

- Planning – which presupposes an analysis of the context and the definition of goals,
- Executing – which also means organising resources and arranging processes,
- Controlling – which has to do with measuring results, comparing them with goals, identifying deviations,
- Acting - trying to correct identified deviations by a follow up before restarting the cycle.

If we combine these managerial activities with our approach to quality, we end up with the most popular basic concept of quality management, the so called PDCA-cycle.

The basics (1): PDCA

PDCA stands for Plan – Do – Check – Act. That is, you have to plan what you want to achieve with regard to a specific quality object, try to reach this goal, check whether you have been successful and if not, check whether your objectives need to be adjusted.

This concept is attributed to William Deming (1900-1993), an American engineer. Interesting enough, Deming himself preferred another wording: He replaced the *check* by *study*, thus indicating that the intention should not be to assess and control (people), but to reflect and to learn how to improve (Moen et al. 2010).

The basics (2): Donabedian's trio

We have already noticed that it is important to define which object is in the focus of your striving for better quality. Here, a concept originally developed in the context of nursing may be helpful. Avedis Donabedian (1919-2000), a physician born in the Lebanon and teaching in the USA, created awareness of the high importance of both structures and processes, if you want to achieve an intended outcome. You have to arrange all interactions, the course of actions, the individual responsibilities in a sensitive manner, if you want to achieve a specific outcome. And of course, you need certain structures – like human resources, infrastructure, legal framework – as a precondition for your processes.

In any kind of branch, when you think about quality management, you therefore will be asked to reflect on the quality of structure, processes and outcome. However, there will be differences in the way you have to improve process quality depending on the type of your process. In educational institutions, you find administrative processes where a transparent, repeatable procedure is desirable. And you find learning and teaching processes that will differ from group

to group, from seminar to seminar, and where individual solutions very often are much more valuable than the mere reproduction of what has already been thought and said before.

The basics (3): Management or assurance?

At the beginning of this chapter, we have introduced **quality management** as a series of management activities following the PDCA-cycle. The implementation of a quality management system (QMS) therefore means the implementation of a concept that enables an organisation to follow this cycle in a systematic way, on a regular basis and independent from staff fluctuation in an organisation. Following this definition, **quality assurance** is only one element of quality management: It is the kind of activities that ensure that the intended goal, e.g. a standard, has been achieved. In the context of Higher Education, quality assurance therefore would be related for example to different paradigms of evaluation (cf. module 3: *Evaluation as Integral Part of Quality Assurance*).

However, in different schools, the definitions of quality management, quality control, and quality assurance may differ or overlap. For example, the ASG-QA use **quality assurance** as a synonym for our definition of quality management mentioned above. The same is the case with the European Standards and Guidelines for Quality Assurance (ESG-QA) in the European Higher Education Area, whereas other international standards that will be introduced in the next chapter (like the ISO-norm) support our point of view. You should be aware of the different wording and decide which wording will best be understood in your organisational context.

3. Internal Quality Assurance (IQA) Models

Even though quality management, as the ASG-QA also indicate, nowadays is indispensable for Higher Education Institutions, the underlying concepts were first developed for other sectors of the economy. Two of these concepts, the ISO norm and the idea of Total Quality Management (TQM) may also be a guideline when implementing a quality management system (QMS) in a Higher Education Institution. Therefore, we will make you familiar with the basic concepts of both and illustrate briefly which may be the advantages and risks you may encounter when applying them to your institution.

ISO 9001:2015

This abbreviation stands for a document, a so called standard, issued by the International Organization for Standardization (ISO). Since its first release in the 1980s, it has been modified several times. The current version was published in 2015. The standard No. 9001 describes on approximately 30 pages what makes up a quality management system (based on seven principles like customer orientation, process approach or evidence-based decision-making). It is framed by two related norms: ISO 9000 that is a glossary for quality-related terms; and ISO 9004 that goes a step further in the direction of total quality management (see below).

As the 9001 standard can be applied to any branch – from agriculture to chemical industry, from hair stylist to business consulting – and to organisations of very different size the requirements are defined in a very abstract way. This makes it possible to also apply it to an educational institution, thus giving you the chance of applying for a worldwide well known certificate. However, at the same time the language of the standard presupposes that you translate every paragraph and every sentence into the context of Higher Education. This is quite a time-consuming task and may make it difficult to motivate colleagues and faculties to

join in the process. If you want to find some orientation in an international standard, it may be more useful to read the ISO 29993:2017 that describes basic requirements for service providers in the field of non-formal education and training.

Total Quality Management (TQM)

The "total" in Total Quality Management indicates that quality can only improve over a long period of time, if all departments of an organisation are aware of their contribution to the outcome. This includes that the management level also must be aware of the importance of each employee, the necessity to foster human resource development and to enable participation. The approach of TQM was developed in the 1980s in the United States, which at this time noticed that Japan began to catch up economically due to a different way of organising industrial production, actually by following Deming's recommendations for quality management. Since 1987, the Malcolm Baldrige Quality Award is awarded to a US company which has implemented a TQM system in an excellent way.

In Europe, the TQM concept was interpreted in the so called *EFQM Excellence Model* launched in 1992 by the European Foundation for Quality Management. It is also the framework for an international award, quite similar to the American Baldridge Award. The current edition of the Excellence Model was presented in 2019 (named however 2020).

Like the ISO-standard, the EFQM Excellence Model also can be applied to organisations of very different branches including education. It highlights the necessity of integrating all relevant stakeholders, creating sustainable benefits and reacting in a flexible way to changing surroundings. Even though it also has a wide-spread target group, the EFQM-model is much easier to understand in an educational context than the ISO-norm.

4. The CORE model: A Specific Concept for QA at Higher Education Institutions

In contrast to the two concepts introduced before, the CORE model was developed explicitly in the context of Higher Education. It was derived from more than ten years of experience with the implementation of a quality management system at FH Münster, a German University of Applied Sciences, quite famous for its managerial approaches. Many colleagues at this university contributed to the implementation of a university-wide quality management system which in 2011 was also the basis of the first accreditation of the internal QA system of a German University of Applied Sciences – the so called *system accreditation*. When explaining our approach to other universities, the author discovered that the university-specific project actually could easily be transformed to a generic model also helping other Higher Education Institutions to analyse, set up or improve their quality management systems.

The model combines four activities relevant for any kind of quality management system with different levels to which these activities can be applied.

The four activities whose initial letters form the CORE are also implicitly included in PDCA cycle. However, we highlight slightly different aspects:

- **C**larify the goals, or as we also could say define the intended outcomes – one element of the PLAN in Deming's circle,
- **O**ptimise structures and processes – implicitly integrated in the steps of PLANNING and DOING,
- **R**eflect on the target achievement and react to one's observations – as included in CHECK/STUDY and ACT and
- **E**ncourage improvement – as additional layer to the whole Deming's circle.

Actually, these four steps are as generic as is the Deming's circle: They may be adapted to any kind of organisation within the educational system and beyond. What makes the concept easily applicable to Higher Education Institutions (HEI), is its combination with the different layers or levels specific for Higher Education Institutions. As we have seen before, quality management at an HEI may refer to a broad range of issues and objects such as teaching and learning, research or third mission. Each of these fields should be structured into different levels, and on each of these levels you should try to figure out how the four aforementioned activities systematically can be implemented.

If we only focus on the field of teaching and learning, we may, for example, differentiate the following levels:

- a specific lesson such as the lesson in the 5th week of the lecture "Mathematics for mechanical engineers" given in the first Bachelor semester,
- the complete course "mathematics for mechanical engineers" in the first Bachelor semester (from the 1st to the last week) and eventually a module with broader intended learning outcomes addressed by the aforementioned lecture as well as by a practical training and a tutorial,
- the whole study programme leading to a Bachelor's degree in mechanical engineering,
- the mechanical engineering faculty with its specific approaches to teaching and learning and the whole range of its study programmes,
- in the end, the whole university with its different faculties and the whole universe of courses and programmes.

	Clarify goals	Optimise structures & processes	Reflect on and react to target achievement	Encourage improvement
Teaching and Learning				
A specific lesson				
A complete lecture				
A study programme				
A faculty				
The whole institution				
Research				
…				
Third Mission				
…				

In module 4 you will learn more about how goals, teaching and learning activities and study programmes should be linked with each other – one important fundament of applying the CORE model to lessons, lectures and study programmes.

5. Lessons Learned: What to Think About When Starting with QA

We have learned from the previous chapters, that it is not enough to implement singular QA activities, but that it is necessary to connect these activities to each other in order to form a system, e.g. by conducting evaluations (check) and reflect on their result in order to deduce improvement measures (act). A systematic approach to QA can support an organisation best to improve quality.

For the setup of a coherent quality management system in your organisation, we recommend that you take the following aspects into consideration that have been of high importance not only in our university but also in many others we were lucky to get to know:

1. **Quality management is a matter for the boss.** Without a person passionate about and responsible for QA on a high level of the institutional hierarchy, it will be very hard for an appointed QA officer (QAO) to implement particular instruments or a system. Therefore, if you are not a member of your universities leadership yourself, you are well advised to keep a close contact with the "big wigs" of your institution, inform and convince them about the importance and benefits of QA. This can be done best by regular meetings and reporting. Since you cannot expect that all members of the management are experts in QA themselves (and usually, they are very busy), the best way to keep them informed is by easy-to-read and brief reports and – of course – by involving them in your idea-generating processes.

2. The implementation of a university-wide quality management system is a huge venture. Only, if your organisation has already a long experience with individual quality management activities, it may be possible to develop all necessary elements to form a coherent system in a short period of time. Usually, the design of a system, the development of various tools and processes, the implementation and the refinement take years. Therefore, it is most important to **be realistic about what can be achieved**. Maybe at the beginning, you can focus on only one area of activity: research, teaching and learning or administrative procedures. In the beginning, you might also want to focus on only one approach or instrument, like, for example study programme self-assessment or course evaluation.

3. Even if you have to focus on one or few elements, as suggested before, it is important to **see the big picture from the beginning on**. And this is meant in both a literal and figurative sense. The figurative sense means, that you should describe the quality cycle (thus, P-D-C-A) as a whole, i.e. including an overall policy (plan) and also mechanisms to deduce improvement measures (act), like, for example target agreements or staff appraisal talks. The overall quality policy will help you to guide your activities in the future, even though today you might concentrate on the implementation of one particular tool only. Seeing the big picture in a literal sense means, that you should try to illustrate in an organogramme or a process chain how the different QA activities taken together form the quality cycle. Maybe one of the basic concepts (ISO, EFQM) you have already learned about can serve as an inspiration for your picture.

4. Even if you start with the implementation of just a few elements of a quality management system: **Quality assurance activities mean additional work and need special qualification**. Sometimes, staff is appointed as a quality assurance officer, but is not relieved from their everyday tasks. In this case, it will be difficult for them to bring forward quality assurance in the institution. Quality assurance is additional work and thus needs additional funds. Apart from that, especially evaluation and data analysis call for qualification in respective methods. Since sometimes important decisions are based on evaluation results, a sound methodology by a knowledgeable person has to be applied. Thus, newly appointed QA staff, should be granted space for properly performing their task and should get the chance to further qualify. If you happen to be one of these newly appointed QAOs, do not hesitate to ask for this. If a university starts to set up a QA unit from scratch, it can be very helpful to combine different skills here: a) someone, who is involved in strategic matters of the institution and enjoys a certain reputation, thus her or his opinion is respected and b) someone, who is skilled in QA methods and tools.

5. Even if your university does not yet have an integrated quality management system, most probably some elements are already in place: Maybe someone has already come up with a policy on how to follow particular workflows. Or one faculty has already implemented a systematic way to organise students' feedback, or you have questionnaires for all students' in the first year… **Collect and appreciate what is already there.** Quality management projects always depend on the expertise and experiences of various stakeholders of a university. Try to involve these departments and people in your project who have already been working on similar topics before. It may not be easy. However, it usually is worth trying to win them as supporters for your project.

6. Regardless of what you focus on, keep in mind that **quality management always crosses borders**. Even if you want to improve the quality of administrative procedures, we recommend that you do not think or communicate that you implement quality management for the administration. Because in many administrative procedures, colleagues from a faculty and one or several administrative departments have to co-operate. And if you want to implement quality management for teaching and learning, this usually cannot be reduced to the quality management of one or several faculties. Again, members of various departments have to interact efficiently and effectively.

7. Usually, not everybody has time or motivation to spend time with quality management. Quality assurance is very often associated with fears of being controlled or of having to cope with a new bureaucratic burden. Therefore, already at the initial stage of implementing QA you should develop ideas how your instruments and your system can be really helpful: **Why should faculty members, students, the presidents' board or administrative staff love your quality management system?** Always ask yourself: Can I really explain why and how this (tool, instrument, procedure…) is meant to improve the quality of what you are having in mind (study programme, course, research project…)? (cf. also the Standards for Evaluation in module 3).

6. Reflective Questions
What do you think?

- How would you define the quality of a Higher Education Institution?
- At your institution, which instruments or elements of quality assurance or quality management are already in use?
- As a QAO, how would you support the process of implementing QA at your institution? What could be your contribution if you are a member of the presidents' board?
- What could be the main challenges for the implementation of QA at your institution?
- Taking into consideration the information about ISO, the EFQM-Model and the CORE model you have received in this text and the screencasts of this module: What kind of model would you see as appropriate for your organisational context?

8. References

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