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Short bio (150 words max):

Olve I. Holaas is employed at the Norwegian University of Science and Technology (NTNU). Holaas is an anthropologist with work experience from a number of countries. He has extensive knowledge of education through several years work for UNESCO, lastly posted in Afghanistan with work on the effect of education in development, on TVET strategy, on development of national qualification frameworks, and on review of the Afghan education system. His background in quality assurance is both from UNESCO and from work for three different HEIs in Norway. Presently Holaas' work is on review processes under QA, and is secretary for the executive committee for engineering education (bachelor degree programme) at NTNU.

Proposal
Title: Quality assurance in converging quality cultures
Abstract (150 words max):
The paper discusses the necessity for flexibility in QA systems through a case study of a recent merger between four HEIs in Norway. It draws on experience from engineering education and shows how quality culture is a constantly changing entity as its actors are changing, as stakeholders are changing.
The paper argues for active involvement of external stakeholders in QA. External stakeholders are actors in the quality culture and therefore cannot be omitted in the QA cycle. All stakeholders, internal and external, are actors in the culture of the institutions, they produce meaning from the construable signs in the HEIs culture, meaning which again change how we perceive these very signs, or symbols. QA systems must therefore ensure that feed-back-mechanisms are in place on both operational and
structural level of the QA, as frameworks change, as legislature change, as indeed stakeholders change. It is thus inevitable that QA-systems must change.

The paper is based on: practice

Has this paper previously been published/presented elsewhere? If yes, give details. No

Text of paper (3000 words max):

January 2016 four Norwegian higher education institutions merged into a huge national actor, the Norwegian University of Science and Technology (NTNU). Some 40 000 students, close to 400 degree awarding study programs, 4 400 academic man-years, and 2 500 admin man-years. In 2017, NTNU received 23,000 applications for 8,800 admissions, an increase from previous years. These are core facts for the university, the nuts and bolts of an HEI, and the manager level is pleased with tangible results after a merger. My focus, however, is on how quality assurance fare after a merger?

The four merging partners were all thriving institutions with good prospects even if they stayed independent. One was an older university with the classic width from languages to technology, and with rights under national law to establish degree programs for bachelor, masters and PhD degrees. Three were professional higher education institutions with degree programs for teachers, health workers, economists, and engineers, with rights to establish bachelor degree programs. When the three PHEIs expanded their degree programs to masters and PhD's, they would apply for accreditation of the degree to the national quality assurance agency. All four had institutional quality assurance systems which were approved by the national quality assurance agency. They walked in beauty (re Lord Byron).

My scope will narrow to engineering education at NTNU. Due to the merger, NTNU became the largest national provider for engineering education (3-year bachelor's degree) in most useful ways one would like to measure largeness. It has most students, most applicants, most academic staff, most study programs, and most second cycle programs to continue an engineer's education for those so inclined (as of date some 25% of the bachelor candidates are). How could you ensure the one path of QA: How would one assure the board of NTNU that the institution delivers high quality in all engineering education, or to quote Rodgers and Hammerstein how do you hold a moonbeam in your hand? In engineering at NTNU, there are 3 000 students divided over 24 bachelor degree programs covering 8-10 engineering disciplines (marine, mechanical, civil, electronics, chemical, logistics, geomatics, oil&gas, materials engineering, ships design), spread over three faculties offered in three towns set in a triangle with legs of 6-7 hours drive. Should NTNU offer civil engineering in all three towns, should all four technical specializations in electronics engineering have classes in all three towns, should it employ more staff in chemical engineering expanding the degree program to all three towns? Would such expansions be conducive to enhanced quality in engineering education? Or should NTNU trim the sails, run a tighter ship, and excel in programs where it already scores well (with respect to applicants, enrolment, drop-outs, grading results, students finished on time, and cooperation with external partners)? How does one enhance quality education throughout the university in engineering in relatively similar study programs? In order to approach these questions, NTNU established the executive committee for engineering education (FUI). FUI is responsible for enhancing quality in engineering education, and is the organisational body where internal stakeholders (faculties, campuses, students) converge. It decides on the structure of engineering education through interpreting national legislature, advice the university’s board on establishing and closing down study programs in engineering, decides which courses are offered in which of the engineering disciplines, and decides special features such as that Engineering Maths 101 is a shared course for all 24 study programs. The committee has monthly meetings alternating between the three towns of NTNU Trondheim, Gjovik and Alesund. There are ten members in FUI, from faculties providing engineering education and with academic staff from the three towns represented, and the students have three seats. Since the merger, FUI commissioned development of three courses in mathematics for engineering, one introductory course on engineering, one course in engineering systemics, two courses in statistics, finance, physics and chemistry combined, and a common structure for the
bachelor’s thesis. All these courses are developed so that students will meet similar intended learning outcomes regardless in which of the three towns they study a particular engineering discipline.

Each autumn FUI receives quality reports from the faculties on a set of quality parameters for the degree programs in engineering, the quality parameters are decided by senior management. The departments, with input from its academic staff, submit reports that are generated into the faculty’s report. FUI provides advice to the faculties for further improving, enhancing, and developing quality. Stakeholders are thus involved in QA, a necessity in order for QA to be an operative tool, as also pointed out by Bollaert (2014:61) “identify your stakeholders in the beginning and involve them in QA management, since quality can only be assured by those who are involved and quality is related to the stakeholders’ needs and wishes”. FUI does not, however, have external stakeholders as members. Below I will address why this is a problem for QA.

The structural mechanism of an executive committee was a tried and tested agent in QA in one of the merging partners, for master’s degrees in technology and teaching, but it had never been tried for engineering education. The deans found the idea interesting and the management decided to establish it. FUI was introduced to engineering education, without an initial needs analysis, based on what already worked successfully in one of the merging partners.

The core element for enhancement of quality in engineering education was thus imposed on the culture. As an anthropologist, I regularly find HEIs handling of the two concepts quality and culture rather troublesome. What is ‘culture’ that we so wish to discuss, in terms of culture of education and quality culture? What is ‘quality’ that we seem to have such a good grasp of in our QA systems, really?

Quality culture, according to Bollart “of an institution or programme is influenced by the surrounding cultures of its stakeholders” (2014:260). I would like to agree. Additionally, actors of the institution or programme is influenced by the quality culture. This processual discourse is at the core of QA, but not necessarily adhered to. Furthermore, Crosby states that “a culture of quality is one in which everybody in the organisation, not just the quality controllers, is responsible for quality”. I daresay we should agree that the stakeholders, both internal and external are influencing quality culture, as well as agree that all stakeholders are responsible for quality culture. Contrary to this, where would we draw the line for influence, where is the mark that says the individual is no longer responsible, when are you a part of the culture of quality and when are you not? The contrary position is unfortunately easy to hold if we accept that QA is a management tool, when quality culture is decided by a board of governors, when quality is defined by the administrative staff hired to support a structure. That is when stakeholders are alienated to the changes in their own cultures and step out of it or develop a sub-culture.

Quality Assurance is defined by Bollaert (2014) as a “management tool to guarantee that the added value that the organisation says to achieve on demand of the requirements and needs of its stakeholders is realised in the most effective and efficient way and is continuously improved”. There is a challenge of the prerequisite of continuous improvement of the added value. As Greere and Riley (2013) points out, feedback is “the very fuel of the quality cycle”. Indeed it is, and feedback will lead to change. Change not just in the values and norms of the individual actor, but changes in the frameworks of interaction; the structural, the social, the ecological/economical and the cognitive (Barth 1966). Without feedback and change, cultures are immobile, static, inflexible. What is static is devolving, stand-still thus does not really exist. Feedback mechanisms also require change in the QA, and if a HEI has not had its sails rigged for continuous changes in its QA, it is losing ground trying to keep up with the future. Management levels of HEIs are structurally well equipped with strategies and tactics and knowledge of day-to-day operations to require change. Courses must change (the society demands new qualifications from our candidates). Exams must change (you must go digital, forget paper, use computers). Professors must change (you must do a course in didactics every five years).

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1 Quote from Harvey&Green «Defining Quality», Assessment and Evaluation in Higher Education, Vol. 18 (1) 1993:9-33
Admin, the noble six-hundred from Kipling, must change (you must be less, but do more, so work smarter).

Stakeholders require these changes, as we find in evaluations of courses, in results from exams, in development in industries, in meetings with companies who are the future employers of our candidates, in external evaluations of degree programs, and by requirements from political leaderships in the ministries.

However, how equipped is a HEI really to induce required changes in sensible directions? Is change as a structural element indeed embedded in a HEIs QA system to enable it to develop as required by cultural changes? Is a QA a cultural tool for generating changes, or a tool imposed by management to record results? Should QA grow from how the HEIs work is changing, from whom we at all times have become, from operations we develop into, so that the QA ensures ownership from professors and students, from stakeholders both internal and external? The merger at NTNU aides me to keep asking these questions.

As an anthropologist and educationalist, I fear that management believes culture can be voted upon and decided. That culture can be defined as an entity in a system and imposed on the organisation. It is thus a chilling experience to listen to management and its consultants under influence by new public management, and even results-based management. To me culture is not something you can touch, nor something you can move or decide, it is not the artefacts and not the people. In the words of Clifford Geertz “man is an animal suspended in webs of significance he himself has spun. I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search for law but an interpretive one in search for meaning” (1973:5), where Geertz paraphrases Max Weber. Culture is what happens between students, between students and teachers, between teachers, between the external and internal stakeholders in an HEI. Bollaert (2014:263) states with Lundberg (2001) that an organizational culture
- is a shared psychological frame of reference…
- of deeply embedded values and assumptions…
- which mould the social behaviour of its members;
- is taught by social interaction, and …
- is invisible, because symbolic, only observable through behaviour, language and objects, yet…
- determining, since it stresses the unique character or identity of the organisation, and …
- is sustainable in time, but alterable yet very difficult.

The board of governors of a HEI or the next management level can surely decide the structure and system of a HEI, such as the QA. However, then you only have a system. A handful of scatter minded rules and regulations. Boxes and dotted lines, beautiful words on a power-point presentation. Adding to this, drawn from Barth (1966), you also have physical constraints (ecological); your HEI is on an island, you have a defined campus, your department is settled in a city. You will have social constraints; there is a former mother-in-law somewhere, your husband lurks at the department, your best friend works at the exam office. Finally there’s the cognitive dimension; what is within reach of your brain, what would you be able to pull out of your hat. What we do, how we weave meaning from the four dimensions of opportunities, possibilities and constraints is interesting. The ‘how’ is guided by our values and norms, our beliefs if you prefer. Based on the values and norms, influenced by the four dimension, action occur and immediately provides feed-back to values and norms for their adjustment, altering or change, and to the opportunities, possibilities and constraints for likewise adjustment, altering or change. That is why you cannot repeat the same class twice, your successful lecture from last year falls flat this term, and one assumes that Introduction to Political Science changed the term after the fall of the Berlin Wall. Our stakeholders are changing as society is, as cultures are, so must our systems.
It does not make too much sense to search to establish a quality culture; it is already there. Can we enhance it? Surely we can. Can we establish it? No, I do not find that we can. It is not an entity for management to establish, create, to bring into the HEI.

Merging the four institutions into NTNU, it would be apt to state that four quality cultures merged. With Harvey and Stensaker (2008) allow me to point to what merged: There are 5 ways of defining quality in higher education. Anthropology has at least 156 definitions of ‘culture’. Finally, there are 9 issues and relationships for quality culture. That should be a cube with $5 \times 156 \times 9$ sides to be considered in the merger, multiplied by 4 institutions. Each of the institutions had a QA system in place and was doing a decent job of enhancing quality in education. Harvey and Stensaker (2008:438) states that “quality culture is not mechanistic or codified, a system produced by specialists for adoption by others but an iterative, indeed dialectical, process of evolution that does not just focus on internal processes but relates them to a wider appreciation of social forces and locates them historically. Quality culture is not a panacea, something that can be disengaged from a wider lived reality”. Quality culture is impossible to define; every HEI is unique and is indeed continuously changing as its culture is. As every individual is an agent of society, as every action by the individual leads to a feed-back to the individual’s values and norms and to the society’s possibilities and constraints, inevitably inducing adjustment, alterations or change, what is woven between the individuals inhabiting the HEI must then also change.

Let me for practical purposes deduce the argued notion of change in QA into two minor examples of contravening requirements:

Low drop-out rates are used by management as a measure of success. That means that if a student changes her/his mind and leaves, the department will look bad and lose money. We should not encourage students to drop out. However, stakeholders demand that students should not be reading in a protected environment, they should interact with students from other disciplines to be able to cooperate and interact better with other disciplines in the magic world of work. Stakeholders also demand that students enrol in foreign exchange programs to enable students to gain international competencies from other institutions and societies, thus improving the student’s learning outcomes. By requiring interdisciplinary and ‘interinstitutional’ learning, we expose students to other study programs and other institutions indirectly tempting the student to drop out of the study program where she/he was enrolled.

Innovation is a spin-word, probably one of the concepts in our sector with most, sometimes contravening, definitions attached to it. Stakeholders, not least external and the senior management, require that innovation is at the forefront of our degree programs. New ways to deliver new truths, and old truths too. QA systems that facilitate enhancing quality must be able to handle the, sometimes rapid, changes stemming from the powerful and very mobile concept innovation. One challenge is that at times it is rather meaningless to discuss improvement of exams as professors measure achieved learning outcomes in different ways as courses change due to their innovative aspects, and it is futile to request reports on a course to fall into institutional chain of command as the course is an innovative co-venture crossing the departments, faculties, institutions, level of institutions, and national borders – not to mention national legislature. By requiring innovative education our QA must be rigged to support that.

Conclusion

Quality culture is what is spun between actors, and one actor is missing from the FUI; the external stakeholders. It is not conducive to enhancing quality in education to omit external stakeholders from the QA, if not for any other reason to ensure continuous revision of the program’s intended learning outcomes for an ever-changing (structures, competencies, locations, client sophistication etc.) labour market.
Bollaert (2014:60) saw QA as a tool for continuous improvement of the added value. The system used to ensure continuous improvement must be constructed to support the HEI also after changes occur, constructed from and by what could be called localised knowledge. “Our simple argument is that ‘localised’ knowledge and practice should play a more important part in developing institutional quality assurance schemes, and that it is only when including such localised knowledge that the structure and culture will merge into a specific ‘quality culture’.” Harvey and Stensaker (2008:437).

Cultures change when stakeholders are added or subtracted from a group. When the rector leaves, we would agree that the institution would change. When four institutions merge, do we acknowledge change? Including external stakeholders in our quality culture would probably also indicate a change. The merger of NTNU could be perceived as seemingly disregarding the element of cultural change, of localised knowledge (though establishing the FUI), thereby omitting to harvest the benefits of the merger itself. Quality assurance systems must emerge from the changing culture of a HEI, be constructed to support these changes, facilitate changes, and be altered as a result of the processual feed-back from these changes.

References:
Barth, Fredrik Models of Social Organization (1966) Occasional Paper No 23, Royal Anthropological Institute
Geertz, Clifford Interpretation of Cultures (1973) Basic Books Inc

Discussion questions:
- How can a QA system be rigged to allow for mechanisms of change, change both on an operational level and on a systemic level
- How can external stakeholders be used in QA to ensure that their involvement is not just figurative
- How do we develop a QA system based on our institution’s quality culture, when the frameworks for the quality culture is changing