ENHANCING QUALITY ASSURANCE IN CONTINUING EDUCATION THROUGH AN ORGANISATIONAL CULTURAL CHANGE

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ABSTRACT

The TU Delft Extension School for Continuing Education underwent a collaborative process to strengthen its quality culture involving professionals and leaders working on designing, developing and delivering its online courses. In this paper we describe the steps taken towards an enhanced Quality Assurance (QA) system. A key part of the Extension School's strategy to guarantee excellence in its online courses is the continuous training provided for instructors and teaching assistants who form the course teams. This is delivered in several ways: specialised hands-on courses and dedicated portals, personal guidance throughout the entire course development process, and an extensive offer of short trainings. This approach contributes both to higher quality for our online courses and to the professional development of our teaching staff, who bring their newly acquired experience and online materials back to their in-campus courses. In this paper, we share the lessons learned on establishing an organisational quality culture, defining QA standards and processes, and we showcase how the professionalisation of instructors plays a pivotal role in offering high-quality education.

INTRODUCTION

The European University Association stresses how the introduction of a quality culture requires an appropriate balance between top-down and bottom-up elements (EUA, 2006, p. 11). As the TU Delft Extension School for Continuing Education embarked on the exciting journey of enhancing its quality assurance system and processes, it laid robust foundations for a culture of quality amongst its staff. This culture of quality propagates further via the professional development that it offers for TU Delft instructors, which in turn is reflected in improved campus education.

THE ENHANCEMENT OF QUALITY ASSURANCE THROUGH AN ORGANISATIONAL CHANGE

In 2021, the Extension School for Continuing Education (ES) was established as a permanent, independent organisational unit embedded within the TU Delft Corporate Office, following an initial seven years when ES operated as an innovation project. Due to the exponential growth in learners (almost 4 million enrolments to date), the number of products (over 200 courses), and the complexity of its processes, a systematic Quality Assurance (QA) plan was needed to ensure quality for the entire ES portfolio and for ES as an institution.

Starting in 2020, various ES staff contributed their expertise to identify the quality needs specific to the organisation. A QA working group was formed to explore the transferability of the QA set-up and processes for campus education into the ES organisation. The working group was composed of 10 members and included administrators, policy makers, education advisors, the business and education support managers, faculty online learning coordinators, the ES QA officer and the Director of ES education. They identified gaps in the ES QA processes, and looked at how existing resources from campus education could be used for QA purposes. These questions resulted in a year-long process of consultation, reflection, and discussion that were later captured in an internal report submitted to the university's executive board; it included recommendations for a new ES organisational structure that was later implemented, and for the financing of additional, dedicated QA resources.

The peculiarity of the process is that it originated as a bottom-up initiative whereby staff members were engaged early on and subsequently endorsed the QA processes that ES established. In our experience, involving staff at various levels in the organisation in those early QA discussions fostered the establishment of a culture of quality. A constructive top-down approach was adopted to support the bottom-up initiative through two structural components: the creation of an ES Quality Assurance Board (QAB), and of the Quality Assurance Officer (QAO) position. The QAB, similar to the Board of Examiners for campus education, guarantees the quality of assessments and certificates in addition to monitoring and advising on the educational quality of the ES portfolio.

These components mirrored the campus set-up, which facilitated their introduction, as staff were already familiar with this structure.

Defining Quality Standards and Processes

In 2022, ES strategic goals featured defining quality metrics for its courses and programmes. The development of an institutional strategy for the QA of digital higher education is advocated to be the first step in supporting high-quality, digital practices (Staring, 2022, p. 33). Being fully embedded within TU Delft, ES aims to guarantee the same educational quality. The Assessment Framework for the Higher Education Accreditation system of the Netherlands (NVAO, 2018) was the starting point for the creation of our organisation's quality framework. The working group broadened its search to industry-leading, international QA frameworks, to identify the standards that would best fit our specific online, continuing education offer. The international frameworks consulted were the E-xcellence Manual (EADTU, 2016), the OSCQR – SUNY Online course quality review rubric [1], and the OLC Scorecard Suite [2]. Taking inspiration from those, the QA working group sought input from staff at all levels in the ES organisation - from senior leaders to administrators and faculty members. Feedback was provided on the quality standards that resonated the most with the ES mission statement and our educational philosophy. This joint effort resulted in a custom-

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[1] https://oscqr.suny.edu/get-oscqr/
[2] https://onlinelearningconsortium.org/consult/olc-quality-scorecard-suite/

made and purpose-built set of multi-layered quality standards and indicators (see Figure 1), empowering stakeholders to uphold quality in their activities. The quality standards and indicators serve as a benchmark to evaluate the impact of our organisation, measure the performance of our portfolio, and report on the achievement of our stated goals (TUD ES, 2022a).
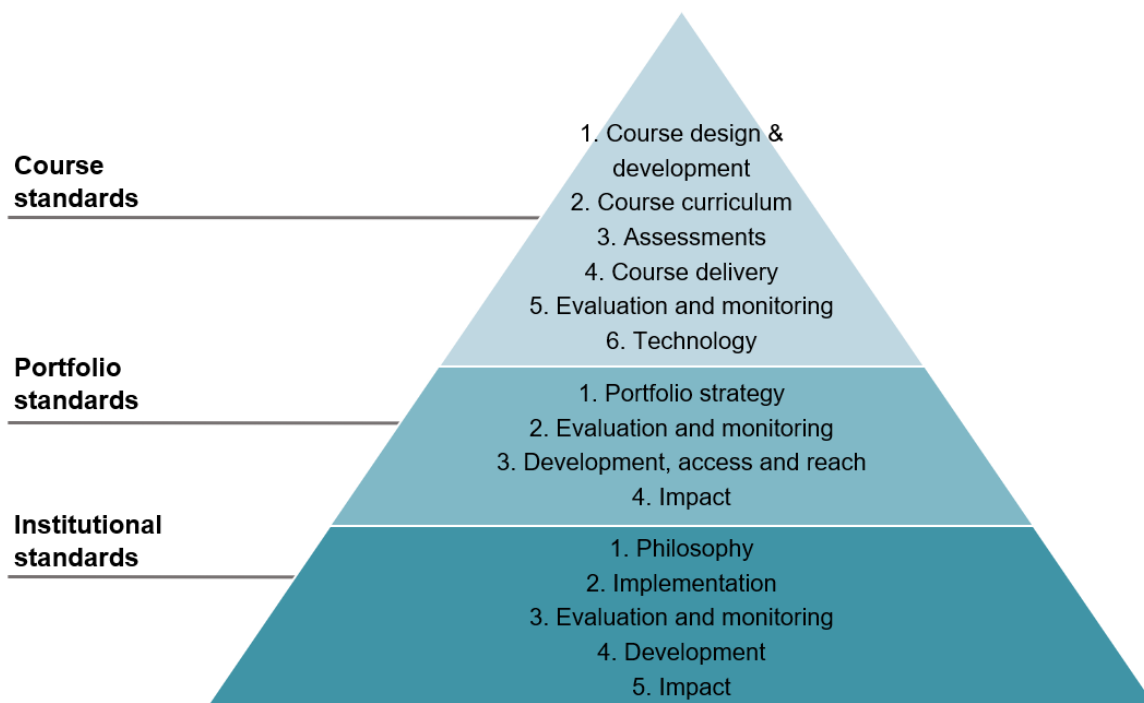
Course standards
1. Course design & development
2. Course curriculum
3. Assessments
4. Course delivery
5. Evaluation and monitoring
6. Technology

Portfolio standards
1. Portfolio strategy
2. Evaluation and monitoring
3. Development, access and reach
4. Impact

Institutional standards
1. Philosophy
2. Implementation
3. Evaluation and monitoring
4. Development
5. Impact

Figure 1: ES three-level quality standards

The stakeholders consulted for each level of the quality standards were, respectively:
- Institutional level (meso-level): management team members, policy advisor, ES executive director and director of ES education;
- Portfolio level (macro-level): product portfolio managers, business development manager, marketing staff, faculty academic portfolio directors and learning developers (LD);
- Course level (micro-level): all LDs, technical instructional designer, faculty online coordinators and education support manager.

The quality standards were reviewed by the ES QAB and approved by the ES management team.

Having established a quality framework, ES staff, led by the QAO, collaborated on identifying processes that could be used to measure, monitor, and regularly report on performance against the given quality framework. This meant identifying existing instruments, such as learners' surveys, which served the purpose of assuring quality, and whether they would need further optimisation to ensure that data was disseminated with the specific purpose of improving the learners' experience. A yearly portfolio review serves to monitor and evaluate the performance of the ES products to assure their quality and market relevance. Such measurement activities and all QA processes have been captured in the QA Handbook[3]; this includes descriptions of the structure and the reporting activities and materials that ES utilises to keep internal and external stakeholders informed about results and potential future improvement.

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[3] https://issuu.com/tudelft-extensionschool/docs/es_qa_handbook_-_jan_2023

Focus on Quality Culture

Once the quality framework was established, the ambition was to raise awareness of the quality standards and to propagate a culture of quality across ES, including the embedding of the standards in its everyday operations and processes. To address the cultural element of quality consisting of shared values, beliefs, expectations and commitment towards quality (EUA, 2006 p. 10), ES needed to develop its own shared vision of the organisational quality culture. We conducted an anonymous survey amongst ES staff to start defining elements for a shared vision and to benchmark the organisation's quality perception. The survey results revealed that staff feel responsible and accountable for the quality of their work and have a strong commitment to collaboration aimed at continuous improvement, a characteristic that is also shared by members of the ES leadership. The lack of specific metrics and unclear quality assurance processes were identified as shortcomings. The overall organisational quality culture was rated 'good' by 71% of respondents (n=25), 'fair' by 17% (n=6), 'excellent' by 8% (n=3), and 'poor' by 2% (n=1). Shortly after the survey, we organised a strategic session whereby all ES staff were invited to participate in discussions and activities around the quality values, beliefs, and commitment that characterise our organisation. The values that resonated the most with the staff were: collaboration, professionalism, trust and commitment to continuous improvement. Using input from the session, we finalised a shared definition of quality culture for ES and our own tagline:

> "Committed to excellence, because we care"

We plan on repeating the survey and engaging staff on the discourse of quality culture. During this process we have learned that establishing a shared culture of quality requires the early involvement of staff at various levels within the organisation through an iterative approach. Anonymous surveys are an effective way to collect baseline data, identify challenges, and collect suggestions for improvements across the entire organisation. Instructors play a crucial role in providing our learners with the high-quality learning experience to which we are committed.

In order to do so, TU Delft instructors are supported in the design, development, and delivery of online courses which meet defined quality standards, through an online course development process. This four-step process, shaped through regular iterations, provides individual guidance, resources, and guarantees the delivery of an optimal learning experience.

ONLINE COURSE DEVELOPMENT PROCESS

ES delivers continuing education by developing a variety of online courses such as Massive Open Online Courses (MOOCs), professional education courses (ProfEds), and Online Academic Courses. Quality in their development is ensured by assigning each course team a designated LD who provides extensive guidance on learner-centric course design for the online format. Additional benefits of this approach are that course team members (instructors, teaching assistants, and content experts) can learn on-the-job and improve their (online) teaching skills. Guidance is also provided for marketing, technical support, media and video production, copywriting and course moderation. The online course development process, outlined in the ES Roadmap (TUD ES, 2022b), is similar to the instructional design model ADDIE (analysis, design, development, implementation and evaluation) (Spatioti *et al.,* 2022). The initial phase starts with a call for proposals. The process consists of four phases: Plan, Produce, Run, and Evaluate, with a total duration of approximately nine months, as shown in Figure 2. Outputs of each of these four phases are monitored and used to further improve QA aspects.

Figure 2: Online Course Development Process Timeline

Plan Phase

The plan phase consists of both planning and designing the course. At this stage, the training needs of the course team members are also identified and addressed. The outputs of this phase are the course Blueprint[4] based on the application of the Online learning Experience tool (OLE radar) described in the pedagogical model (Jorge, 2015, p. 2) the Storyboard, and the Course About Page. The Blueprint provides a visual overview of the online learning experience including the target audience, the learning objectives, and assessments. The Storyboard, similar to the Carpe Diem model by Gilly Salmon (Salmon *et al.,* 2020), helps the course team align online activities and corresponding assessments. The Course About Page informs learners on course duration, required time investment, structure, format and any pre-requisites.

Production Phase

Usually, within four months, the course team would have created the course content and uploaded it to the online platform. The LD works closely with the course team, ensuring the course content is aligned with the QA Standards. Two quality control steps are executed in this phase, the "reality check" after the first course unit has been created and the "beta test" to ensure the entire course meets the quality standards before being released.

Run Phase

After launch, the course is moderated to encourage learners' participation and to learn from each other, answer questions, give feedback, and keep participants informed as necessary. During the run phase, learners are asked to fill out two surveys: one at the beginning of the course, about their expectations, and one at the end of the course, about their experience.

Evaluation Phase

The evaluation phase is the final step in the QA process and serves as input for the improvement of a future run. In the evaluation meeting the course team, LD, QA officer and business manager analyse platform data and learner surveys. These are used as input for a course improvement plan and to revise course content and activities.

We have learned that by using this four-step process, quality is guaranteed throughout the course design and delivery. Through the systematic evaluation of courses, institutions ensure

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[4] https://onlinelearninghub.tudelft.nl/plan/

the implementation of the QA cycle which is executed in the Plan – Do – Check – Act steps outlined in the Deming cycle[5].

CONTINUING PROFESSIONAL DEVELOPMENT

To guarantee excellence in our online courses, a key part of our strategy is providing continuous training for course teams on how best to design for online education and to engage learners effectively. ES does this in various ways, for example, via online and face-to-face courses and workshops; two of these are: Designing and Teaching an Online Course and Building and Moderating Extension School courses. Participants of the online training Designing and Teaching an Online Course are introduced to the OLE Tool and the Online Course Development Process and use the four phases to improve efficiency in design and project planning. Starting from an initial idea or topic, through different modules, asynchronous activities and synchronous sessions, course participants design a blueprint of their course, a storyboard, a learning sequence, a learning activity and a communication plan to implement in their own online course.

The training Building and Moderating ES courses is a self-paced, interactive course on the effective use of the online platform and on community management. Other ES trainings include scriptwriting, presenting in front of a camera, blending campus education, presenting, video making, copyright and licensing and more.

ES works collaboratively with Teaching and Learning Services[6] helping instructors acquire additional, practical skills for designing online courses. This supports their professionalisation as educators. A survey conducted in 2022 demonstrated how such skills can be transferred to (hybrid) campus education and benefit lecturers and students alike through improved teaching materials (especially videos and quizzes), and an increased availability of examples, enhancing the overall quality of teaching.

Potential Future Improvements

Notwithstanding the numerous steps taken toward establishing a quality culture within ES, we foresee more opportunities for improvements in QA. Future challenges include making the quality principles operational and measurable in our everyday tasks, whilst continuing to report on the results achieved.

Through future collaboration with other universities and experts in the field of online learning, we hope to continue improving the ES' educational offer to the benefit of learners. To this end, QA will play a pivotal role in ensuring the systematic application of rigorous monitoring and evaluation processes.

CONCLUSIONS AND LESSONS LEARNED

In summary, we advocate that adopting a holistic, bottom-up approach will help institutions establish a robust QA system. Our experience has shown that to maintain a pervasive quality culture, attention should be placed on improving existing QA practices and on collaboratively identifying gap areas. Developing a shared vision on quality was perceived as a tangible action to show commitment to continuous improvement. It ensures individual efforts are channelled in structured collaborative processes that see the active participation of multiple stakeholders. In contrast to quality compliance, QA should not be perceived as being

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[5] https://deming.org/explore/pdsa/
[6] https://www.tudelft.nl/teaching-support

imposed from above, but rather be driven by individuals, who in this way develop a strong sense of ownership. At the same time, we recognise the importance of leadership's role in addressing quality issues. Management's commitment to quality is crucial in and must be clearly communicated through visible actions and the establishment of dedicated resources. Finally, in our experience, systematic guidance and support should be provided to instructors to ensure that the expected quality standards are rigorously applied and maintained in the delivery of online continuing education. Formal and informal trainings should also be offered to fulfil the professionalisation goals of instructors in the field of continuing education, which then reflect in improved material for campus education.

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