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**“FOSTERING SOCIALLY DISTANCED AND INCLUSIVE ON
CAMPUS EDUCATION IN ARMENIAN HEIS”**

KUNGLIGA TEKNISKA HOEGSKOLAN (KTH)

**BEST PRACTICE COLLECTION &
BENCHMARKING OF QA IN DIGITAL TLA
COUNTRY CASE – SWEDEN**

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Preface

This document was developed in the framework of the eCampus project in order to provide best practices of the quality evaluation and course analysis on the course level. During the elaboration of the best practice report, it became obvious that in order the report to be useful and understandable, it is necessary to provide necessary context – quality assurance system on national and institutional level.

Finally, this document consists of following parts:

- The template provided by the Armenian team
- Description of the quality assurance system in Sweden
- Description of the quality assurance system implemented at KTH
- Description of the best practice
- List of the links and resources

Section 1: Institutional & National Context

Provide a concise overview of the national and institutional environment in which the quality assurance (QA) initiative is implemented. Include the following:

- **Country:** Sweden
- **Name of the institution or QA body:** KTH Royal Institute of Technology
- **Type of QA initiative** (e.g., national strategy, institutional framework, pilot program): national strategy, institutional framework
- **Targeted education levels** (e.g., Bachelor, Master, etc.): Bachelor, Master, PhD

Maturity of e-learning:

Advanced: Digital tools and methodologies are fully integrated in higher education.

Section 2: QA Focus Areas in Digital TLA

The aim of this section is the Implementation (What is done).

2.1 Digital Course Design

- Does your institution have a clearly defined pedagogical model for e-learning?
- Are curricula designed to be flexible and modular for digital delivery?
- Who is involved in course development (academic/technical staff)?
- How are student needs and digital learning profiles considered in programme design?

Prior to describing the project in more details, it is important to provide background on organization of the educational activities at KTH.

At KTH, we apply CDIO (see www.cdio.org for more information) and constructive alignment while developing courses: learning outcomes, teaching methods and assessment tools shall be align to provide best possible environment for the student learning. It is the responsibility of respective teacher to identify and apply the most suitable teaching methods and assessment tools in the course and digital instruments are a natural part of the process.

LMS is the corner stone of the learning environment at KTH and it is a single environment for delivery of the courses. KTH uses LMS Canvas and further in the text you will find references to it.

KTH has a very clear vision for e-learning:

- KTH should use digital tools in all courses where it is deemed to lead to better learning.
- The aim is not to save time, but to use time in the best way possible.
- This vision does not exclude MOOC:s or distance learning, forefront courses/projects are necessary to test, study and develop new methods and tools.
- The best practices are then deployed for entire university.

KTH Vision 2027 adopted in 2016 constitutes following:

- The opportunities opened up by e-learning technologies have been incorporated, and the virtual campus is as important as its physical equivalent. Innovation in education shows a distinct link to technological and social innovation"
- Education at KTH is characterized by individualized learning in innovative learning environments.

Pedagogical development of academic staff at KTH is compulsory for career development and all members of the academic staff shall collect 15 ECTS of the pedagogical development courses in order to be eligible for academic promotion.

- Basic course for teachers: Teaching and Learning in Higher Education 7.5 credits
- Basic course for the PhD students: Basic Communication and Teaching 3.0 credits
- Basic course for the Doctoral supervisors: Doctoral Supervision 3.0 credits

Advanced courses for the teachers (selective):

- Digital Learning in Higher Education 4.5 credits
- Teaching and Learning for Challenge Driven Education in a Global Context 3.0 credits
- Gender Theory and Gender Equality in Technical Higher Education 4.5 credits
- Examinership for Courses at KTH 1.5 credits
- Supervision and Assessment of Degree Project Work in First and Second Cycle 3.0 credits
- Leading Educational Development 3.0 credits
- Develop the Learning by Using Grading Criteria 1.5 credits
- Learning for Sustainable Development 4.5 credits
- Scholarship of Teaching and Learning 3.0 credits

All courses at KTH shall be developed following CDIO concept and constructive alignment. Each course has a single responsible person – Examiner, who is the decision-maker when it comes to the course structure, teaching methods and examination. A course can involve several persons who contribute during different parts of the course (labs, individual/team project, report, etc) but final decision about grades for the course is taken by the Examiner.

Student feedback is a natural part of each course and Examiner is responsible for collecting the feedback, analysis and presenting the course development plan. The new module for course evaluation and analysis is developed and integrated into Canvas, detailed description of the module and its operation is provided in the separate file.

(Project Course evaluation.docx)

2.2 Online Assessment & Exams

- What QA processes are in place to ensure academic integrity in online assessments?
- Are e-assessments aligned with intended learning outcomes?
- How is student authentication ensured (e.g., plagiarism detection, proctoring)?
- Are students informed and trained about digital assessment protocols?

KTH doesn't have separate regulations for the online assessment and exams.

Detailed description of KTH QA framework as a part of national QA is provided in the separate file. (**Quality assurance in higher education in Sweden and KTH.docx**)

KTH applies guidelines on student involvement to all spheres of the university activities, see file **Guideline_on_Student_Influence.pdf**

2.3 Learning Analytics

- What learning analytics tools are used (if any)?
- How is data used to support student learning and engagement?
- Are analytics used for QA decision-making?
- What ethical policies exist for the use of student data in analytics?

KTH has the set of policies covering all aspects of managing personal information strictly in accordance with the national (Swedish) legislation.

In Sweden universities, use a common system – LADOK for collecting and storing all study-related information including attended courses, grades, exam results, etc. All statistical information can be extracted directly from the system.

Decision-making on course development is taken on the base of the statistical information extracted from LADOK and course evaluation and analysis.

KTH uses LMS Canvas for all education activities. Canvas also provides extensive possibilities for statistical analysis on the course level. All teachers are offered a short course on use of course analytics in Canvas.

More detailed information can be found at following link:

<https://intra.kth.se/en/utbildning/systemstod/data-informed-education/canvas-course-analytics-1.1363240>

2.4 Digital Student Support

- What academic, technical, and psychological support is available digitally?
- Is support tailored to students' digital profiles or needs?
- How do students access support during non-standard hours (evenings/weekends)?
- Do students receive training in using the VLE, e-library, and communication tools?

All communication with the students is carried out through Canvas. Different communication possibilities are provided. All students have a possibility to take a course on use of Canvas. The course is freely available through the LMS and it is a responsibility of each student to learn how to use and operate inside Canvas.

The pattern for communication with the students is decided by each involved teacher and announced to the students.

KTH offers extensive support for the students through web <https://www.kth.se/en/student>.

Training and support is provided through the web. All students have possibility to receive personalized face-to-face support at the support center KTH Entre situated in the university campus.

2.5 Staff Digital Competence

- How are teaching staff trained for digital pedagogy and tools?
- What support services (e.g., instructional design, IT help) are available for them?
- How are staff workload and coordination managed in e-learning delivery?
- Is there a system for peer exchange and good practice sharing?

KTH staff is offered a range of courses on higher education pedagogy including use of digital tools in teaching and learning, see above.

KTH unit for E-learning provides extensive support for the teachers. More details about the offered support can be found under following link: <https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support>

In particular, regular workshops are offered on the most demanded topics. These workshops are carried out in Zoom and do not need pre-registration. Examples of the upcoming workshops:

Workshop: SpeedGrader in Canvas

Workshop: Canvas Course Analytics for Data Informed Teaching

KTH teachers can also ask for personal coaching which can take place via Zoom or face-to-face: <https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support/personlig-handledning-1.885187>

Support is also provided on School level (KTH has 5 Schools):

<https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support/lokalt-stod-1.1233031>

The unit for E-learning provides an opportunity to get connected to the news feed to receive live updates and up-to-date information about the developments in subject area:

<https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support/prenumerera-pa-nyhetsflode-och-annan-viktig-information-1.1114236>

There is also a possibility to submit comments and/or suggestions for improvement of the e-learning infrastructure: <https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support/synpunkter-forbattringar-1.1114245>

For sharing experiences and networking on higher education pedagogy there are several arenas, more details:

<https://intra.kth.se/en/utbildning/utveckling-och-hogskolepedagogik/arenor>

2.6 Digital Accessibility & Inclusion

- How does your institution ensure accessibility for students with disabilities?
- How is digital inclusion supported for students from diverse or remote backgrounds?
- Are multiple learning pathways (e.g., asynchronous) offered?
- Are equity and inclusion tracked or evaluated within QA systems?

KTH has rules and guidelines on developing inclusive and accessible content. A short course **Digital@KTH - Create and publish content** is offered to all staff members via Canvas. The aim of the course is to facilitate development of inclusive and accessible content.

KTH provides extensive support for students with special needs. This support is carried out through a dedicated unit – FUNKA, placed on KTH Educational Office, University administration. Detailed information can be found here: <https://www.kth.se/en/student/stod/studier/funktionsnedsattning>

Equity and inclusion are integrated into regular activities of the university following respective university policies. The policies are provided in their entirety as attachment to this document.

2.7 Data Protection & Ethics

- What are the institutional policies on student data privacy and ethical use?
- How is transparency maintained regarding the use of digital data?
- How is informed consent obtained from students in digital environments?
- How are breaches or unethical practices monitored and sanctioned?

Data protection is implemented strictly in accordance to the national legislation.

Personal information in the user database is mainly full name and social security number. Social security number is for restricted use, such as identification when retrieving a new KTH password. Most of the systems use the individual, unique KTH-ID to identify the user. In the user database there is also information about group affiliations, mainly according to Ladok (courses and study program) and staff registry database (institutions and units), manually administered groups also exist.

More details are provided at following link: <https://www.kth.se/en/student/it>

2.8 Digital Infrastructure QA

- How is the VLE or LMS evaluated for reliability, accessibility, and usability?
- How often is the digital infrastructure reviewed and improved?
- Are there procedures in place for managing outages or risks?
- Do QA processes cover platform alignment with teaching needs?

KTH has well developed digital infrastructure providing possibility to access various digital resources.

KTH uses LMS Canvas for all operations related to education. LMS provide environment for teaching and learning with various ways of communication between teachers and students.

Canvas is continuously developing with new features and tools integrated into the environment.

There is also a possibility to submit comments and/or suggestions for improvement of the e-learning infrastructure: <https://intra.kth.se/en/utbildning/e-larande/kontakt-och-support/synpunkter-forbattringar-1.1114245>

Section 3: Key QA Principles and Criteria

The aim of this section is the Framework (Why and how it is done).

Outline the guiding quality principles (e.g., equity, learner-centeredness, innovation, transparency). List standards and benchmarks used to evaluate digital TLA. Describe how principles are implemented and what indicators are used to measure them.

N/A: KTH doesn't have quality principles exclusively to digital TLA.

Guidelines for the Systematic Quality Assurance and Enhancement of Education shall be applied by academic staff at KTH for all courses and programs. The Guidelines are provided as attachment to this document.

Section 4: QA Methodologies and Tools

Describe tools and processes used to implement QA:

- Internal QA: dashboards, course review, analytics
- External QA: peer reviews, site visits
- Data: surveys, performance metrics
- QA cycle: annual, rolling, etc.

Explain how QA practices are adapted to e-learning specifics.

N/A: KTH doesn't have quality principles exclusively to digital TLA.

Detailed information on regular QA methods, tools and processes are provided in the separate file: Guidelines-for-the-Systematic-Quality-Assurance-and-Enhancement-of-Education.pdf, see the folder Guidelines

Section 5: Stakeholder Involvement

Explain how various stakeholders are engaged in QA for digital TLA:

- Students
- Academic Staff
- QA Units
- IT/Digital Support Units
- Employers/Alumni
- External Experts

N/A: KTH doesn't have quality principles exclusively to digital TLA.

Section 6: Results, Impact, and Lessons Learned

Summarize results of the QA initiative:

- Improvements in quality, access, or engagement
- Institutional or national policy changes
- Lessons for implementation and sustainability

Best practice on integration of quality evaluation and analysis is provided further in this document as a separate chapter.

Section 7: Documentation & References

List or attach key materials that support your QA case:

- QA policy documents

- Evaluation frameworks or templates
- Reports or case studies
- External links or references

List of references is provided in the end of this document.

Section 8: Reflections and Transferability

Reflect on the potential for others to learn from or adapt this practice:

- What makes this practice transferable?
- What challenges might others face?
- What would you recommend for adaptation in other systems?

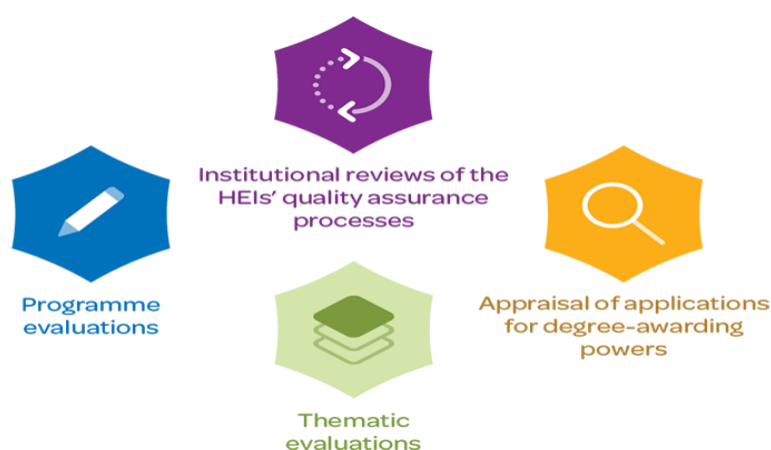
Quality assurance in higher education in Sweden

On the national level the Swedish Higher Education Authority (UKÄ) carries out overarching activities in securing quality of higher education. UKÄ is an independent government agency and its operations comprise three main areas:

- Quality assurance of higher education and research, and appraisal of the degree-awarding powers of public-sector higher education institutions.
- Legal supervision of higher education.
- Monitoring efficiency, follow-up and horizon scanning as well as responsibility for statistics in the higher education sector.

Higher Education Institutions (HEIs) and the Swedish Higher Education Authority (UKÄ) have a shared responsibility for quality assurance in higher education and research. The system consists of four components

The new quality assurance system for higher education, which the Government tasked UKÄ to develop, consists of the following four components:



Assessment areas

The reviews are based on assessment areas developed in dialogue with representatives from HEIs, teachers, students, employers and the labour market. The six assessment areas are:

- governance and organisation
- preconditions
- design, implementation and outcomes
- student and doctoral student perspective
- working life and collaboration
- gender equality

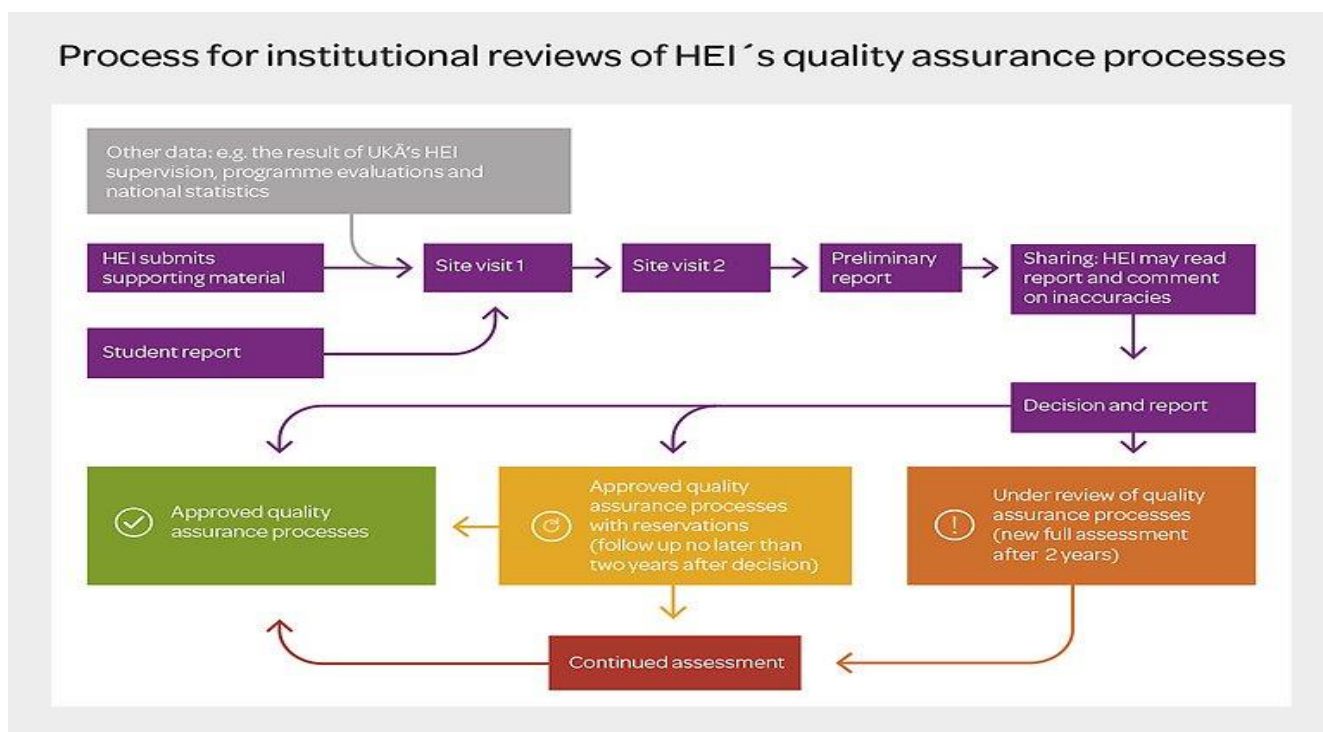
The system is developed and implemented in accordance with the Higher Education Act, the Higher Education Ordinance and the *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*.

Institutional reviews of the HEIs' quality assurance processes

Institutional reviews aim to confirm that the quality assurance processes ensure high quality courses and programmes and help to enhance the HEIs' quality.

HEIs and the Swedish Higher Education Authority (UKÄ) have a shared responsibility for quality assurance in higher education and research. Most quality assurance efforts are to be conducted by the HEIs. This requires HEIs to have systematic quality assurance processes that UKÄ is responsible for assessing.

The process for institutional reviews:



Assessment material

The basis for the review consists of a self-evaluation by the HEI, a student report, interviews, site visits, audit trails and other information. All assessment material for the review is to be weighed together.

1. The HEI's self-evaluation. The HEIs are asked to describe, analyse and evaluate how they systematically ensure and follow up that they fulfil the assessment criteria for the different aspects and perspectives. Examples should be given to support the presentation.

2. Student report. The local student union has the option of submitting a written statement, known as a student report, in which the union gives its opinion of the quality assurance work at the HEI.

3. Two site visits. The purpose of the first site visit is partly to give the assessors a chance to ask questions based on the HEI's self-evaluation and partly to identify the focus areas which the assessment panel will follow during its second visit to the HEI's. Representatives from the HEI, students and any working life representatives which the HEI cooperates with will participate in the interviews. In conjunction with the first site visit, HEI representatives and UKÄ's analyst and assessment panel chair will go through the types of documentation that the HEI is to provide for each audit trail.

The purpose of the second site visit is to, via the selected audit trails, review whether the HEI's quality work is systematic so that the quality work improves and ensures that the

educational activities are of high quality. At this second site visit the audit trails are studied and the assessment panel may interview the HEI's leadership, teachers, students, and any other staff groups and working life representatives with the HEI collaborates.

4. Audit trails. To examine how quality assurance processes work in practice, the assessors examine one or more areas of focus. In this context, areas of focus are quality assurance processes, related to the aspects, perspectives and assessment criteria in the selected and assessed environment during the site visit. To see how quality assurance processes work in practice, the process is followed from the overall organisation at the HEI to the local level, that is, an environment which could consist of one or more courses and programmes (main field, subject area, programme) or other types of environments, like a library.

5. Other assessment material. Prior to reviews, UKÄ produces data for the HEI relevant to the aspects to be examined. This data could be previous inspections, appraisals of degree-awarding power applications, programme evaluations and national statistics showing student completion and establishment levels, and illustrating the HEI from a national perspective.

Assessments and reports

The assessment panel's judgment on whether the HEI meets the assessment criteria for the reviewed aspect areas and perspectives results in a report that serves as the basis for UKÄ's decision. Before UKÄ's final decision, the panel's preliminary judgement will be sent to the HEI for review.

Three-point scale

The overall judgement of the HEI's quality assurance processes is given on a three-point scale:

1. **Approved quality assurance processes.** The HEI's quality assurance processes are well described, well argued for and well-functioning in practice. They are systematic and effective at all levels of the HEI, from leadership level to department level. All assessment areas are judged as satisfactory.
2. **Approved quality assurance processes with reservations.** The HEI's quality assurance processes are fairly well described, well argued for and well-functioning in practice. The decision clarifies which assessment areas are not satisfactory, which the HEI is to follow up and take action to remedy within a certain period of time. The assessment panel believes the HEI can rectify the deficiencies within two years.
3. **Quality assurance processes under review.** There are several significant deficiencies in the HEI's quality assurance processes with regard to how they are described, argued for and how well they function in practice. The assessment panel believes the HEI cannot rectify the deficiencies within one year. UKÄ specifies that the HEI's quality assurance processes must be reviewed again in their entirety.

Follow-up

In the case of approved quality assurance processes

UKÄ believes it is important that even HEI's that receive approval for their quality assurance work have follow-ups. The forms for this type of follow-up include dialogue meetings, surveys and conferences.

In the case of approved quality assurance processes with reservations

UKÄ appoints an assessment panel that follows up the measures taken. Online interviews and site visits are included in the follow-up if needed. If the follow-up review leads to a positive assessment, the HEI's quality assurance processes in their entirety will be approved by the UKÄ. If the HEI still does not meet the assessment criteria in the follow-up review, an additional follow-up review will be conducted after a period agreed upon by the UKÄ and the HEI jointly on a case-by-case basis.

In the event of quality assurance processes under review

A new, complete review of the HEI's quality assurance processes will be carried out two years after UKÄ's decision is made. An assessment panel will be appointed to review the self-evaluation and other documentation. Online interviews and site visits are included in the new review. If the review results in a positive assessment, the HEI quality assurance processes in their entirety will be approved by the UKÄ. If the HEI's quality assurance processes are still under review after the new review, a follow-up will be carried out after a period agreed upon by the UKÄ and the HEI on a case-by-case basis. This also means that additional programmes at the HEI may be evaluated by UKÄ's representatives.

Programme evaluations

The aim of programme evaluations is to monitor the programmes' outcomes and to contribute to the higher education institution's own quality improvements for the reviewed programmes.

The programme evaluations emphasise the actual conditions and results, that is, how the programme meets the requirements of applicable laws and ordinances. Consideration should also be given to *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*.

Furthermore, the programme evaluations will focus on how the programmes ensure that students are given good opportunities to achieve the qualitative targets of the System of Qualifications, and how the HEI ensures that students have achieved the qualification objectives upon graduation.

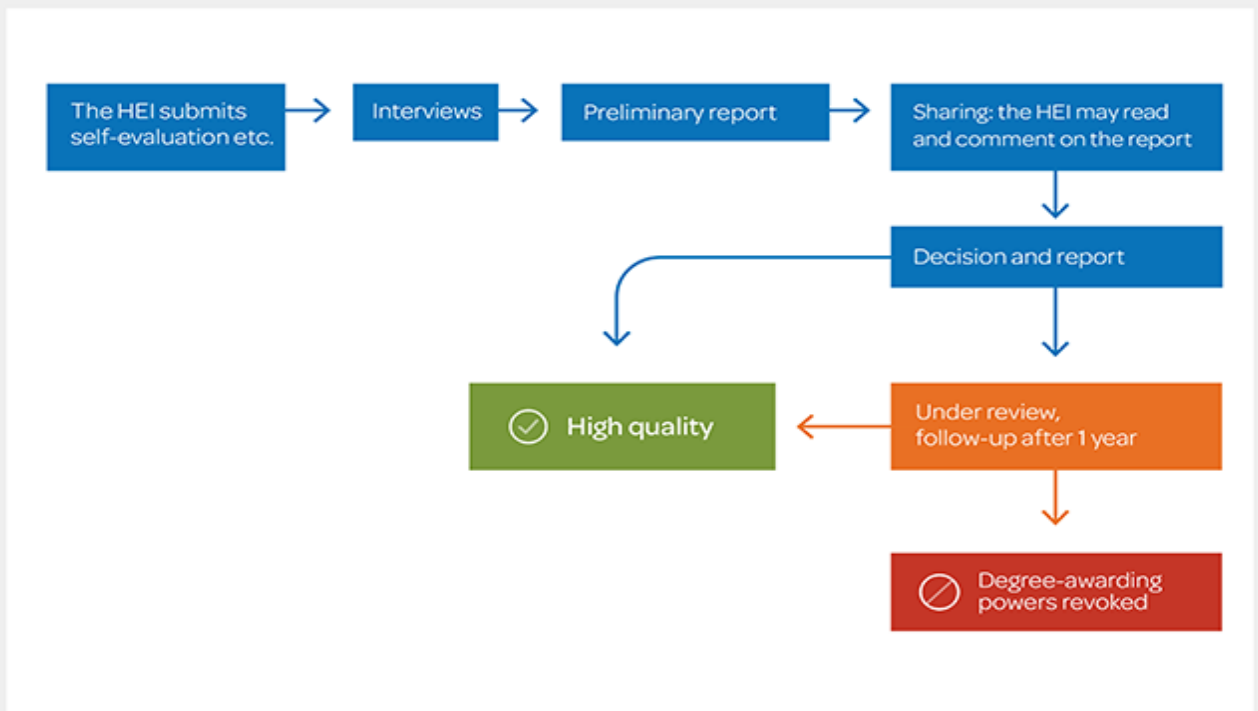
Selection criteria

All programmes are to be subject to quality review. This is done partly through the HEIs having responsibility for the quality assurance of their own programmes and partly by the Swedish Higher Education Authority (UKÄ) evaluating a selection of study programmes at the first-, second- and third-cycle levels. This selection can either be done by reviewing all programmes at individual institutions or by reviewing the same programmes at all the reviewed HEIs to provide a national overview of the quality of a particular programme. The selection of programmes to include in UKÄ's reviews is based on several different criteria:

- A selection of the programmes that were not covered by the 2011–2014 evaluation system should be evaluated.
- A national overview of the quality of some professional qualifications is needed. This applies primarily to regulated professional qualifications.
- If an HEI's quality assurance processes do not meet the criteria in UKÄ's review, additional programmes may be selected for evaluation.
- UKÄ can initiate an evaluation if indications point to a risk that individual programmes are not fulfilling the quality requirements for the programme.

The programme evaluation process

The programme evaluation process



Assessment areas:

- preconditions
- design, implementation and outcomes (including gender equality and follow-up, measures and feedback)
- student perspective
- working life and collaboration

Assessment material

Assessment material consists of the HEI's self-evaluation with annexes, interviews with students and representatives of the reviewed programme, and other material that UKÄ produces. Randomly selected degree projects also serve as data for the programme evaluations at first- and second-cycle levels.

1. The HEI's self-evaluation. The HEI is asked to describe, analyse and evaluate specific examples of how it systematically ensures and follows up the evaluated programme's quality and how it has ensured that students have fulfilled degree objectives upon receiving the degree.

2. Degree project. Randomly selected degree projects will serve as a basis for assessing the outcomes of programmes at the first- and second-cycle levels.

3. Interviews. Interviews with students and representatives of the reviewed programme will be held to supplement the assessors' overview of the self-evaluation, degree projects and other documentation. During these interviews, statements from the HEI's representatives and the experience of students can be highlighted.

4. Other assessment material. Prior to the reviews, UKÄ will compile data on the HEI and the programme that is relevant to the aspect areas being examined. This could include

national statistics showing the student completion rate and establishment level, previous inspections, appraisals of degree-awarding powers and previous programme evaluations.

Assessments and reports

The assessment panel's determinations and reasoning are to be clearly presented in a report. This report will serve as feedback to the HEI on development possibilities and good examples identified by the assessors. Furthermore, anything judged to have insufficient quality in the case of a negative finding should be clearly stated.

Before UKÄ's final decision, the report will be sent to the HEI for review according to the procedure described previously in this report. The final report will then be the basis for UKÄ's decision.

Decision

The overall rating is given on a two-point scale. On the basis of the assessor panel's report, UKÄ will decide if the programme maintains high quality or if the programme is under review. If a programme is under review, this means that UKÄ is also questioning the degree-awarding powers of the HEI when it comes to the qualification and subject field in question.

Follow-up

HEIs with programmes under review will have one year to address the deficiencies and submit an action report to UKÄ. To review the HEI's report of measures taken, UKÄ will appoint a panel of assessors. Supported by the assessor panel's report, UKÄ will decide if the programme maintains high quality or if degree-awarding powers are to be revoked.

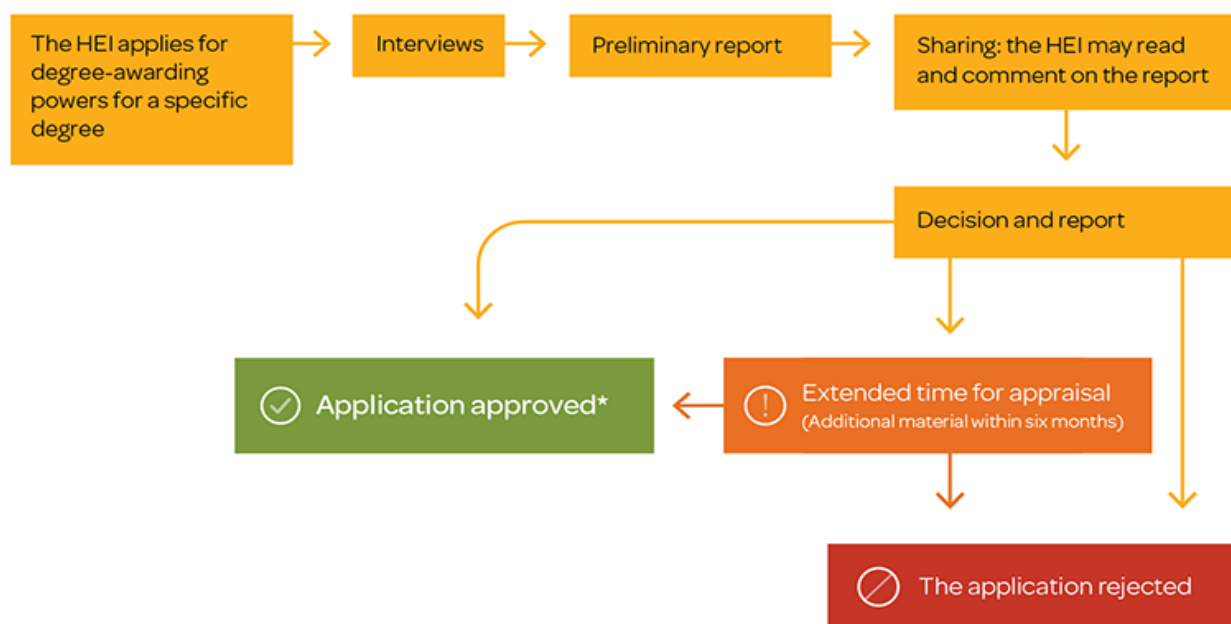
Appraisal of applications for degree-awarding powers

The Swedish Higher Education Authority (UKÄ) decides which higher education institutions are to be entitled to award a degree.

[Information about the new Bachelor of Science in Dental Hygiene \(tandhygienistexamen\)](#)

The appraisals of degree-awarding power applications undertaken by UKÄ examine whether the education provider meets the necessary prerequisites for the students to be able to achieve the qualitative targets for the degree.

Process for appraising degree-awarding power applications



* For individual HEIs, the Swedish University of Agricultural Sciences and the Swedish Defence University: The Government makes the decision based on UKÄ's recommendation.

Assessment material

Reviews are based on the HEI's application and interviews with programme representatives. All assessment material for the review is to be weighed together.

1. HEI applications. Applications for degree-awarding powers are submitted to UKÄ. Independent higher education providers, the Swedish University of Agricultural Sciences and the Swedish Defence University submit their applications to the Government, which then normally sends the application to UKÄ for review and report.

2. Interviews. The written application is supplemented with interviews with programme representatives. Interviews with students are conducted if the programme is already being offered at a closely-related degree level or within a field or subject that can be considered closely related to the degree being applied for.

Reviews, reports and decisions

The assessment panel's task is to report whether the programme fulfils the assessment criteria for the reviewed aspect areas and perspectives. It will do this based on the application, interviews and any supplemental information. In the case of a negative report, the assessment panel's determinations and reasoning must clearly present what is judged to be inadequate. In its report, the panel recommends whether to grant or deny the application. UKÄ's position is based on this report and recommendation for a decision, and on UKÄ's deliberations. Before UKÄ's final decision, the report will be sent to the HEI for review.

All aspect areas and perspectives must be judged as satisfactory for the application to be granted. In cases of a smaller but well-defined issue, where measures to remedy the issue are deemed within reach, UKÄ can extend the review period. The deadline to submit additional information is six months.

UKÄ makes decisions on degree-awarding authorisation for state HEIs, except for the Swedish University of Agricultural Sciences and the Swedish Defence University. For independent higher education providers, the Swedish University of Agricultural Sciences and the Swedish Defence University, the assessment panel and UKÄ's determination and recommendation to approve or not approve the application will be submitted to the Government.

Follow-up

UKÄ considers it important to follow-up its reviews, including reviews of degree-awarding applications. Forms of follow-up for reviews of degree-awarding applications are currently being developed.

Thematic evaluations

The purpose of thematic evaluations is to provide a better understanding and national comparisons of how various higher education institutions (HEIs) work and of achieved results in the examined theme.

Choice of theme

Thematic evaluations are to be based on tasks of importance for quality in higher education assigned to HEIs by legislation and ordinances. Themes that can be evaluated include widening participation, internationalisation and gender equality. Other relevant themes for evaluation are the usefulness of courses and programmes and preparation for careers, dimensioning of higher education places and sustainable development. Information obtained through the Swedish Higher Education Authority's (UKÄ's) different activities, analyses and assignments can also be used for thematic evaluations.

Methods

The methodology applied to the thematic evaluations is developed and adapted to the relevant theme, but it should follow the methods used for the other components whenever possible. UKÄ will notify HEIs about the relevant methodology well ahead of beginning a thematic evaluation.

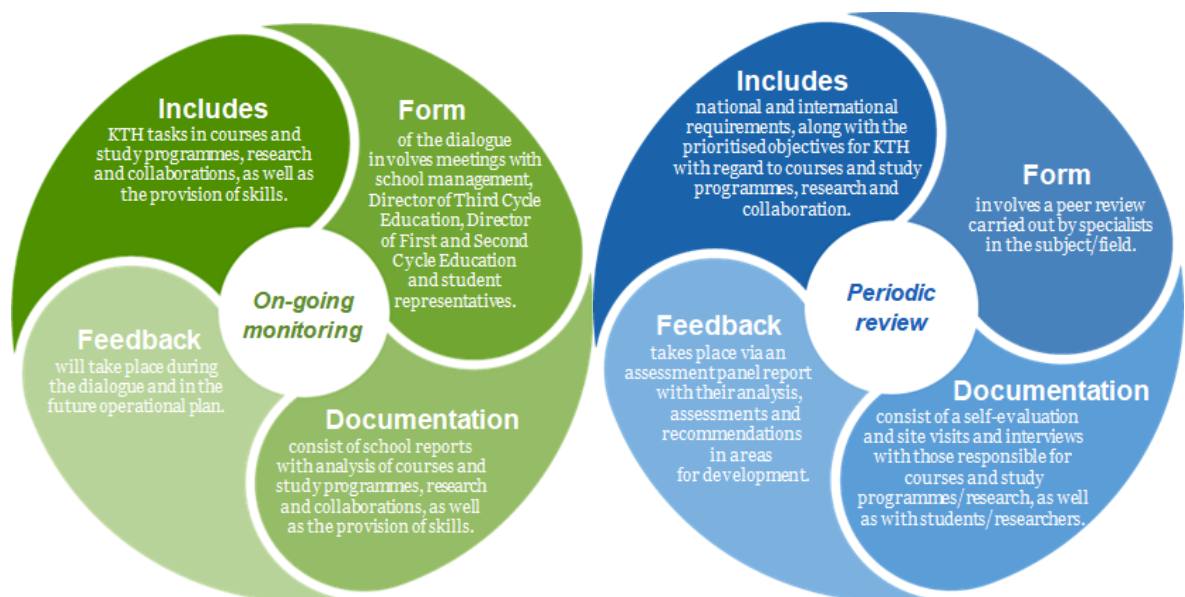
The KTH quality assurance system

Overall structure of the KTH quality assurance system

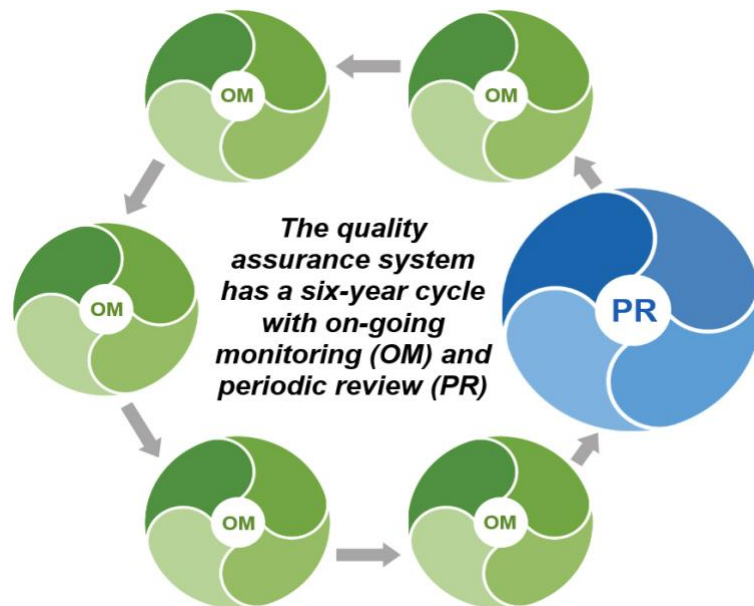
The KTH quality assurance system consists of two main coherent parts, both of which aim to follow-up on, ensure and develop the quality of courses and study programmes, research and collaboration. One part is the *annual on-going monitoring* that includes a follow up of all courses and study programmes, a follow up of all research and a follow up of collaboration in both education and research. The Dean of Faculty plans and leads the on-going monitoring every year. The other main part of the Quality Assurance system is the six-year cycle of *periodic reviews* that includes all courses and study programmes, all research and all collaboration in education and research.

The six-year cycle of periodic reviews of *courses and study programmes, including collaboration*, is the responsibility of KTH's schools to plan and carry in accordance with the instructions of the Faculty Council. This means that each school itself can decide when its courses and programs, including collaboration, will be reviewed during the six-year cycle.

The six-year cycle of periodic review of *research, including collaboration*, is the responsibility of the Vice President for Research to plan and execute and is carried out as a Research Assessment Exercise (RAE) of all KTH's research at the same time once every six years.



On-going monitoring and periodic reviews of courses and programmes, research and collaboration is not new to KTH. On-going monitoring has been conducted for many years as a part of the annual follow up process and in the Presidents' dialog with each school at KTH. Periodic reviews has been carried out as self-initiated reviews as the Research Assessment Exercise (RAE) in 2008 and 2012, the Education Assessment Exercise (EAE) in 2011 and the Administration Assessment Exercise (AAE) in 2014. What is new is that the on-going monitoring and the periodic review of KTH's courses and programmes, research and collaboration now are parts of a coherent system, carried out in a six-year cycle and has been harmonized with the national Quality Assurance System. This also means that KTH's Quality Assurance System includes the Standards and Guidelines for Quality Assurance in the European Higher Education Sector (ESG). Illustrated in figure 1 below is a six-year cycle in KTH's Quality Assurance System.



Principles for on-going monitoring

The on-going monitoring takes place annually and includes a quality dialogue led by the Dean of Faculty. It covers courses and study programmes and research including collaboration as well as the development of academic skills among the research and teaching staff. The on-going monitoring is based on school reports with aggregated analyses of all school programmes, the research at each institution at KTH as well as the schools plans for the provision and development of academic skills.

The purpose of the on-going monitoring is to follow-up all degree programmes at all levels, all research and the provision of academic skills in order to highlight any deficiencies or problems with quality, identify development needs and short- and long-term measures.

Students and doctoral students from the current courses and study programmes appointed by the Royal Institute of Technology Student Union (THS) will always be offered to take part in the process of on-going monitoring and the quality dialogue.

The results from the on-going monitoring are published on KTH's web-platform for on-going monitoring and quality dialogue (Webbplattform för kontinuerlig uppföljning och kvalitetsdialog). The results are also given as feedback to the schools and the Vice President before they are taken into account in the work with the KTH annual activity plan.

Principles for periodic reviews

The principles for periodic reviews of courses and programmes, including collaboration, is different from the periodic review of research only in a few ways. The periodic review of courses and programmes, including collaboration takes place continuously in a six-year cycle and the responsibilities for this process is delegated to each school. The periodic review of research, including collaboration, is planned and executed by the KTH Vice President for Research and includes all the research at KTH at the same time every six years. A part from this the processes are very similar. The periodic review of courses and programs, research and collaboration involves a self-evaluation process and a peer review. Peer review means that the assessment will be conducted by peers with relevant subject or field expertise who are impartial and independent in relation to the programme or the research.

It is a requirement that the expert panel in a periodic review of programmes that lead to a second or to a third cycle qualification must always include an assessor from another Swedish or foreign university. The assessment of research must always be carried out by panels with international experts in the field.

A written self-evaluation of the current programmes respectively research will constitute the primary basis for assessment of the review. Site visits and interviews are also important parts in the review process. In the review of courses and programmes, the self-evaluation must describe, analyse and evaluate the courses and study programmes as well as collaboration in such a way that the review will include the assessment areas in the national Quality Assurance System carried out by UKÄ as well as the KTH goals for education. In the review of research the self-evaluation must describe, analyse and evaluate the research and collaboration in such a way that the review will include the assessment areas that the steering committee for quality assurance of research at KTH develops in a dialogue with KTH schools.[1] These assessment areas must include KTH's own goals as well as the assessment areas in the future national Quality Assurance System for research carried out by UKÄ. The latter includes SUHF:s *Joint framework for HEIs' research quality assurance and enhancement systems* and the European Commissions' *European Charter for Researchers* and the *Code of Conduct for the Recruitment of Researchers*.

Students and doctoral students from the current courses and study programmes appointed by the Royal Institute of Technology Student Union (THS) will always be offered to take part in the self-evaluation process.

The results from the periodic review will be reported to the Faculty Council, the President and the KTH board and be followed up in the on-going monitoring every year. The results will also be commented on by the KTH management and published on the KTH web.

[1] Members of the steering committee for quality assurance of research is the Vice President for research, the Dean, the Deputy President, the University Director, Head of Research Office, the Director Strategic Partnerships, the Project manager for RAE and a Quality Assurance Officer.

Roles and responsibilities in quality assurance

The KTH Quality Policy is based on the principle that KTH has clearly formalised roles, responsibilities and administrative support functions for quality assurance.

The Faculty Council has overall responsibility for issues relating to the quality of education, research and community interaction. The Council is chaired by the Dean of Faculty. It represents the entire faculty and acts as an advisory body to the President.

The President and University Board are responsible for internal organisation issues and financial management. The University Administration supports university management in e.g. policy making, coordination, planning and evaluation. Within the University Administration, Planning, Quality Assurance and Administrative Law provides support on quality assurance matters.

The KTH Schools are responsible for the quality of their own operations. Each school is headed by a Head of School. Each school appoints a Director of First and Second Cycle Education, and a Director of Third Cycle Education.

Best practice: New IT system support for course evaluation and course analysis

To strengthen and facilitate course evaluation and course analysis, KTH has decided to develop a new IT system with a higher degree of automation. The new system will also provide better access to data to support developing the quality of courses.

Prior to describing the project in more details, it is important to provide background on organization of the educational activities at KTH.

At KTH we apply constructive alignment while developing a course: learning outcomes, teaching methods and assessment tools shall be align to provide best possible environment for the student learning. It is the responsibility of respective teacher to identify and apply the most suitable teaching methods and assessment tools and digital instruments are a natural part of the process.

LMS is the corner stone of the learning environment at KTH and it is a single environment for delivery of the courses. KTH uses LMS Canvas and further in the text you will find references to it.

Terminology

Survey owner: The person responsible for the course survey. By default, the survey owner is the course coordinator. It is possible to change or add more people responsible for the survey.

Course evaluation: The evaluation students make of the course, for example by answering the course survey.

Report: Two reports are created after the course survey closes for responses, one with free text answers and one without. The reports are the basis for the course analysis. If no course analysis is done, the results of the course survey without free text answers are published.

Course analysis: Analysis made by the course coordinator based on the results of the course evaluation. Insights from, for example, course evaluation board meetings and other contacts with students during the course can also be included in the analysis.

Course data: Statistical information about the course and the course offering, such as the number of credits of the course, the number of registered students and responsible teachers.

Course evaluation board: Each course should have a course evaluation board made up of students taking the course who meet with the teacher and can express the views of the course participants.

Course instance: Instance of a course offering to which students apply and are admitted. Programme students, fee-paying students and freestanding students are admitted to different course instances, but are then taught in the same course offering. Course instances should thus be grouped together into one course offering. Course surveys are created per course instance.

Course offering: A practical implementation of a course. A course offering has a common start time, a common pace and normally common teaching for a group of students. The schedule is set per course offering and the course PM is designed per course offering.

The best practice in brief

- The new system is Artologik Survey&Report, integrated into Canvas, which is adapted to KTH's needs.
- The system was tested during autumn semester 2024 (HT24) and launched during spring semester 2025 (VT25).
- Course evaluations are generated automatically with clearer templates, which reduces the workload for teachers.
- Uniform templates are introduced for course evaluation, course analysis and the action plans drawn up for courses with identified shortcomings.
- Trainings and recommendations for the new system were offered for all academic and support staff.

Background

The project to develop a new system for course evaluation and course analysis is part of a larger project to review KTH's entire quality assurance system for education.

Reviewing KTH's quality assurance system for education

During the years 2022-2023, the Dean of Faculty and the Faculty Council have been responsible for conducting a review of KTH's quality assurance system for education. The starting point for the review has been to evaluate whether the system is effective and appropriate, whether it is adapted to KTH's activities and organisation, and whether it creates value for KTH's teachers, students and management.

During the process of analysing the system, a problem statement has emerged. The problems relate partly to the fact that the system does not support the identification of shortcomings or does not require measures to be taken, and that functions in the line organisation are not involved in the quality assurance work. It also came to light that there are divided opinions about the benefits of the work with programme analyses, school reports and quality dialogues. The quality assurance work done on courses, for example through course evaluations and course analyses, has not been a clear part of the quality assurance system before either.

The starting point for the revised quality assurance system, including the work on course evaluation and course analysis, has been that it should support continuous work on following up the activities in order to identify strengths and weaknesses, to define areas of development and to follow up both measures taken and developments. Feedback to all parties involved, including students and doctoral students, is also an important part of the system. The quality system must also be resource efficient, both in terms of time spent by staff and from a financial perspective.

Quality assurance work for courses

At course level, the review showed that identified quality shortcomings can persist from year to year and that course analyses have not been perceived as meaningful by all teachers. There is also a lack of uniformity in course evaluation surveys and course analyses are rarely fed back to students. In addition, there is often a low response rate to course evaluations from students and doctoral students.

To improve the quality assurance work, the Faculty Council and Dean of Faculty have taken the initiative to prioritise course evaluation and course analysis within the revised quality assurance system.

Purpose

The purpose of the project is to develop the process support for course evaluations and course analysis with a system that simplifies the work for the teachers, ensures that all students and doctoral students are given the opportunity to answer the course surveys and that the data collected is made available to various stakeholders at KTH. Through the course evaluations the students and doctoral students will be given the opportunity, with a focus on course development and the students' goal achievement, to provide opinions on the design of the course, the examination and their own efforts. With the new system, course analyses will be easily published and available to read, which increases feedback to students and doctoral students.

The work also includes introducing uniform templates for course evaluation, course analysis and for the action plans to be drawn up for courses with identified shortcomings. By using the same templates, it will also be possible to compile and analyse data at different levels within KTH. It will also enable the relevant functions to get an overall picture of how the quality work with courses is conducted.

Goals

The project will result in KTH having implemented the new system for course evaluation and course analysis, Artologik Survey&Report, and developed new processes and support for the system.

Project goals

After the project is completed, seven project goals are achieved:

1. **New platform:** Implemented a KTH-wide IT system for course evaluation and analysis.
2. **Canvas integration:** Integrated the system with Canvas for more efficient access and management of course evaluations and analyses.
3. **Automated course analysis:** Introduced automatic course analyses based on KTH's standard template with the possibility for teachers to add their own questions.
4. **Moderation of free text answers:** Provided a function for moderation of free text answers to facilitate management for teachers.
5. **Publication of analyses:** Implemented automatic publication of open course analysis (part 1) while internal analysis (part 2) is kept private for teachers.
6. **Data infrastructure:** Created an infrastructure to utilise course evaluation and analysis data for quality monitoring.
7. **Data protection:** Guaranteed that data storage and data management follows KTH's regulations.

Impact goals

After completion of the project, two overall impact goals achieved:

1. All KTH's students will after each completed course round have the opportunity to submit their views in a course evaluation according to KTH's course evaluation survey template, so that KTH can ensure compliance with the Higher Education Ordinance, Chapter 1, Section 14.
2. All courses will have a published course analysis after the end of the course instance.

Process for course evaluation and analysis

Here you can see what the process for course evaluation and course analysis looks like, step by step from the creation of the course survey to the completion of the course analysis and a possible action plan is created. A teacher, do not need to do anything until it is time to write the course analysis, everything else is done automatically via Canvas.

However, a teacher has the opportunity to customise the course survey before it is sent out. In the process, the teacher sees what happens and when, as well as instructions on how to customise a course survey and how to complete the course analysis.

Full process and timeline for course survey and course analysis

Here the full process and timeline for course survey and course analysis is provided.

1. Course survey is created and e-mail is sent to course coordinator

The course survey is automatically created for each course offering, according to a standardised survey template. The survey is created 5 weeks before the survey's preset

publication for students. At this point, the survey is only visible to the course coordinator and is not published for students until later.

An e-mail is sent to the course coordinator(s) to inform them that the survey is available. Now it is possible to adjust the survey - see next step.

2. Opportunity to adjust course survey

Before publishing, the course coordinator can adjust the survey by adding questions, choosing to moderate free text answers (see step 6), adding more authorised persons or adjusting the start date.

The course survey start date, and publication for students, is preset to the Monday after the course end date. The start date can be adjusted to publish the survey up to 35 days earlier or up to 7 days later.

Students always have 11 days to respond to the survey. If the start date is changed, the end date is automatically set to 11 days after the new start date.

3. Course survey is published

The course survey is published in the course room in Canvas and is now visible to students who are registered for the course offering. If the start date of the survey has not been adjusted, the course survey is published on the Monday after the course end date.

4. Course survey is answered

Students have 11 days to respond to the survey from the survey's publication date. Reminders are also sent to students.

5. Course survey closes

The course survey closes after 11 days and can no longer be answered.

6. Free text responses are moderated

You can choose to have free text answers submitted in the course survey reviewed before they are published for the teacher. This option is provided so that you do not have to deal with difficult comments on your own, to avoid seeing inappropriate comments and to get support if needed.

The moderation is done by person(s) selected at each school. The reviewer can handle it, for example, by masking or deleting inappropriate comments or summarizing the content and reviewing it with you as a teacher.

7. Reports are created

Two different reports based on the course survey and course data are created. Data and examination results from the course are automatically generated and visible in the reports. In the [course analysis template](#) you can see which data is included. Please note that the reports are only visible to teachers in this stage.

- **Part 1:** With free text answers. This report is only visible to the course coordinator and any other authorised users added, such as the head of department or Programme Director. *The report with free text answers is never published publicly.*
- **Part 2:** Without free text answers. This report is included in the course analysis that is later published in the course room in Canvas.

Note that reports are only created if at least three students have answered the survey to ensure that the survey maintains anonymity.

8. Course analysis is written

The course coordinator writes their course analysis within 7 weeks (49 days) from the course end date.

In the course analysis, it is possible to write both public and internal reflections. Internal reflections are only visible to the course coordinator and other authorised persons involved in the development of the course, such as the Programme Director or head of department. It is possible to save a draft course analysis before publishing it.

Course analysis example is attached as a separate file.

9. Course analysis is published

The course analysis is automatically published in the course room in Canvas 7 weeks (49 days) after the course end date.

If you have finished the course analysis before 7 weeks, it can be published earlier. If there is no published course analysis, only results from the course survey and course data are published.

If you have started writing a course analysis and saved a draft, your draft will be published automatically after 7 weeks.

In the course analysis template one can see which parts are published in Canvas.

On the course page under About course, course data and what is filled in under the last heading from the course analysis, 'changes introduced for the next course offering', are published. It is available to everyone, both internal and external, who visits the course page.

10. Action plan is created if needed

The action plan is a more in-depth version of the course analysis that is created if the course needs certain development. When working on the action plan, a teacher has more time and space to carry out relevant course development.

Course analysis content, published in Canvas

The course analysis, which is published in Canvas and is visible to students, contains, in addition to the teacher's analysis, data and study results from the course, results from the course survey and other course evaluation methods.

Course overview

Information about the course is visible in the report and is automatically retrieved from study documentation systems. This includes the course name, the school giving the course, the examiner and the course coordinator, the examination modules and the like.

Course outcome

The course analysis contains the outcome of various reported elements of the course, which are collected automatically. Courses can have several different types of examinations. The course analysis shows the grade distribution for different examinations, the overall result for all examinations and possible short comment from you as a teacher.

Results from automatic course evaluation survey

The course analysis shows results from the automatic course evaluation survey that students have answered, without free text answers.

Summary of results from course evaluation

In the course analysis, you as a teacher compile results from course evaluation methods such as course committee meetings, course meetings and free text responses in the survey.

Course coordinator's reflections on what has worked well and what can be developed in the course

In the course analysis, you as a teacher can reflect on what has worked well or less so during the course, and what can be developed for upcoming course offerings.

Summary of changes to be introduced for the next course

Teacher summarizes the analysis and describes what changes will be introduced for upcoming course offerings. The changes are summarized briefly, for example in a bulleted list. The changes can be based, for example, on course evaluation results and other relevant course data.

Note that changes introduced for upcoming course offerings are also published publicly under About course on kth.se.

Content published publicly on about course

Under About course on kth.se, certain course data is published (such as course information and examination results) as well as what changes are introduced for upcoming course offerings, see above heading. Results from the course evaluation survey are not published under About course.

Internal reflections are not published publicly or for students in Canvas

A teacher, can write your own, internal comments in the course analysis that do not appear publicly on About course or for students in Canvas. The own comments are only visible to the teacher and other relevant internal functions, such as the programme manager.

A teacher can, for example, comment on changes that have taken place since the previous course, what worked well with the course and how the course can be developed in the future.

Action plan in details

Why is an action plan created?

If a course is in need of certain development, an action plan should be created for the course. Development needs can be identified in connection with course evaluation, course analysis or through some other form of follow-up.

An action plan can be initiated in two different ways:

1. By own initiative by the course coordinator, examiner, Programme Director or head of department.
2. Automatically by the course evaluation system in Canvas, if the average value of the students' answers to the last question of the course survey is below 3.0.

Reasons for requesting an action plan on your own initiative may be a greater need for development than can be accommodated within normal course development, a need to develop progression within a programme, a need for subject renewal, a sudden change in throughput, or a long-term low throughput.

What does the action plan contain?

In the action plan, the course coordinator describes the actions planned for the next time the course is offered. The reason for the action plan (if different from the course survey results) can also be stated.

The plan is developed with the support of colleagues and students. You therefore need to gather information from several sources, for example from student representatives via the course evaluation board, the study board president (SNO) or the programme responsible student (PAS), and from colleagues such as the Programme Director (PA), head of department or other teachers. Utilise the meetings that are already planned to make the work more efficient.

The actions listed in the action plan, unlike the course analysis, are binding and will be followed up by the head of department. The action plan is not published for students, but goes to the Programme Director and the head of department. The Programme Director can choose to inform the students about the planned actions.

Action plan process

The action plan process can be broken down into five steps.

1. Initiating action plan

The action plan can be initiated in two different ways:

1. On your own initiative by the course coordinator, examiner, Programme Director or head of department. The person initiating the action plan gives a short description of the reason.
2. Automatically by the course evaluation system in Canvas, if the average value of the answers to the last question in the course survey (*my overall impression of the course regarding both implementation and content is that it is good*) is below 3.0 out of 5.0.

2. Action plan is created by course coordinator

The course coordinator creates the action plan with the support of, for example, colleagues and the head of department. Information gathering for further analysis and consultation with students and the Programme Director may be needed. When the action plan is ready, it is sent to the Programme Director.

3. Action plan is approved by programme director

The Programme Director approves the plan if they think it contains sufficient actions. If changes are needed, it goes back to the course coordinator for revision. When the action plan is approved, it is sent to the head of department.

4. Action plan is decided by head of department

The head of department decides that the action plan should be implemented. If changes are needed, it goes back to the course coordinator for revision.

5. Measures are implemented

When the plan is decided, the measures included in the plan are implemented. The measures should be implemented by the next time the course is offered, except for courses that are offered frequently.

Responsibility for the action plan

The action plan is created by the course coordinator and/or examiner with the support of the institution providing the course. The Programme Director approves that the measures are sufficient. The head of department is responsible for ensuring that the action plan is created, that the planned measures are implemented, and that funds/staff are allocated to the measures decided. Other than that, the functions required to take relevant measures are involved.

The Director of First and Second Cycle Education or the Director of Third Cycle Education at the school and the relevant Programme Director should be informed of the action work and are responsible for ensuring that the action plans are followed up well before the course is given again to see if the planned measures have been taken or remain.

The development and follow-up of action plans, including the handling of measures that remain, are handled according to the respective school's procedures.

List of resources

1. Swedish National Higher Education Authority <https://www.uka.se/swedish-higher-education-authority>
2. KTH Student support web (in English) <https://www.kth.se/en/student>
3. KTH Student resources and study guidance:
<https://www.kth.se/en/student/stod/studier/fusk-1.997287>
4. Guidelines on avoiding plagiarism: <https://kth.diva-portal.org/smash/get/diva2:498928/FULLTEXT01.pdf> (this document contains guidance in Swedish in English and starts with the Swedish version. **English version starts from the page 86.**)
5. Latest information for students on promoting learning and preventing cheating including use of AI tools: <https://intra.kth.se/en/utbildning/utveckling-och-hogskolepedagogik/nyheter/att-framja-larande-och-forebygga-fusk-1.1181654>
6. KTH Information for students with disabilities:
<https://www.kth.se/en/student/stod/studier/funktionsnedsattning/funka-1.953214>
7. E-learning at KTH <https://intra.kth.se/en/utbildning/e-larande>
8. Course evaluation and course development:
<https://intra.kth.se/en/utbildning/systemstod/kursvardering-och-kursutveckling>
9. Courses on higher education pedagogical development:
<https://intra.kth.se/en/utbildning/utveckling-och-hogskolepedagogik/hogskolepedagogik>
10. Links to the resources on KTH website on pedagogical development:
<https://intra.kth.se/en/utbildning/utveckling-och-hogskolepedagogik/stodmaterial>
11. Guide on Challenge Driven Education:
<https://intra.kth.se/en/utbildning/utveckling-och-hogskolepedagogik/stodmaterial/utmaningsdriven-utbildning-1.847345>

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