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EVALUATION CENTRE

AUDIT OF TAMPERE UNIVERSITY OF APPLIED SCIENCES 2016

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Abstract

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Authors

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The Finnish Education Evaluation Centre (FINEEC) has conducted an audit of Tampere University of Applied Sciences and awarded the institution a quality label that will be valid for six years from 14 March 2016. The quality system of the Tampere University of Applied Sciences fulfils the national criteria set for quality management at higher education institutions, and the system corresponds to the European quality assurance principles and recommendations for higher education institutions.

The object of the audit was the quality system that Tampere University of Applied Sciences has developed based on its own needs and goals. The freely selected audit target chosen by the institution was Global Education. The following elements were regarded as key strengths of the quality system:

- The TASO process and the performance agreement process are the outcomes of a diligently manoeuvred endeavour to bring together two cultures and two systems after the merger of the Pirkanmaa and Tampere Universities of Applied Sciences; they now form the backbone of the QMS as well as overarching drivers for further development work, thus constituting an evident strength of TAMK.
- The quality manual *Compass* and the architecture of TAMK's intranet as a portal for quality management for all internal stakeholders are decisive elements for the functioning of the system.
- The high commitment of all of TAMK's staff to continuous quality management work constitutes an essential and laudable feature of TAMK's quality culture.

Among other things, FINEEC gave the following recommendations to Tampere University of Applied Sciences:

- TAMK has built an extensive and comprehensive quality management system that produces a lot of information. Indeed, the amount of data the system provides appears to exceed the processing and utilisation capacity of TAMK. The audit team recommends that TAMK selects the most important and useful data-generating tools and questionnaires and omits those that do not serve its direct needs: it should always be absolutely clear for what purpose data is produced, how the data will be utilised and whether the data produced is fit for purpose. The UAS should also remember that many forms of quality data do not need to be gathered every year; a longer cycle could increase the importance and usefulness of e.g. feedback.
- The interviewees provided the audit team with numerous and varying interpretations of the roles of and connections between internationalisation and global education activities at TAMK. There even appeared to be somewhat of a lack of shared understanding of the vision of TAMK. The audit team recommends that TAMK refines its understanding of internationalisation and global education activities and defines their status in the quality management system of TAMK more clearly.
- The audit team recommends that TAMK's quality management system is developed to pay more attention to students' engagement in the research, development and innovation (RDI) activities of TAMK.

Keywords

Evaluation, audit, quality management system, quality management, quality, higher education institutions, university of applied sciences

Tiivistelmä

Julkaisija

Kansallinen koulutuksen arviointikeskus

Julkaisun nimi

Tampereen ammattikorkeakoulun auditointi 2016

Tekijät

Eva Werner, Robert Coelen, Anne Ahkola-Lehtinen, Luis Carvalho, Antti Saaristo, Matti Kajaste ja Kati Isoaho

Kansallinen koulutuksen arviointikeskus on toteuttanut Tampereen ammattikorkeakoulun auditoinnin ja antanut korkeakoululle laatuleiman, joka on voimassa kuusi vuotta 14.3.2016 alkaen. Tampereen ammattikorkeakoulun laatujärjestelmä täyttää korkeakoulujen laadunhallinnalle asetetut kansalliset kriteerit ja vastaa eurooppalaisia korkeakoulujen laadunhallinnan periaatteita ja suosituksia. Auditoinnin kohteena oli Tampereen ammattikorkeakoulun laatujärjestelmä, jonka se on kehittänyt omista lähtökohdistaan ja tavoitteidensa mukaisesti. Ammattikorkeakoulun valitsema vapaavalintainen auditointikohde oli koulutusvienti (*global education*). Laatujärjestelmän keskeiset vahvuudet ovat:

- TASO- ja tulossopimusprosessit ovat syntyneet huolellisen valmistelutyön tuloksena, jossa samalla yhdistyivät Pirkanmaan ja Tampereen ammattikorkeakoulut. Prosessit muodostavat laatujärjestelmän selkärangan ja tukevat vahvasti korkeakoulun kehittämistyötä.
- Laatukäsikirja Kompassi ja TAMKin sisäisen laadunhallinnan intranet ovat ratkaisevassa asemassa laatujärjestelmän toiminnassa.
- TAMKin henkilöstön korkea sitoutuminen pitkäjänteiseen laadunhallintatyöhön on tärkeä osa ammattikorkeakoulun laatukulttuuria.

Tampereen ammattikorkeakoululle esitetään muun muassa seuraavat suositukset laatujärjestelmän kehittämiseksi:

- TAMK on rakentanut laajan ja kattavan laatujärjestelmän, joka tuottaa paljon tietoa. Vaikuttaisi siltä, ettei ammattikorkeakoulu pysty käsittelemään ja hyödyntämään kaikkea kerättyä tietoa. Auditointiryhmä esittää, että TAMK valitsee kaikkein tärkeimmät ja hyödyllisimmät laatutietoa tuottavat työkalut ja luopuu niistä menetelmistä ja kyselyistä, jotka eivät suoraan palvele sen etuja. Tulisi olla aina täysin selvää miksi tietoa tuotetaan, miten se hyödynnetään ja onko tieto varmasti tarpeellista. Kaikkea seurantatietoa ei tarvitse tuottaa vuosittain, vaan harvempi sykli saattaisi lisätä esimerkiksi palautetiedon merkitystä ja hyödyllisyyttä.
- Haastatteluissa ilmeni erilaisia ja vaihtelevia tulkintoja koulutusviennin ja kansainvälistymisen roolista ja yhteyksistä Tampereen ammattikorkeakoulussa. Jopa TAMKin visiosta oli erilaisia käsityksiä. Auditointiryhmä ehdottaa, että jaettu ymmärrys kansainvälistymisestä ja koulutusvientitoiminnasta kirkastetaan ja että niiden asema TAMKin laatujärjestelmässä määritellään tarkemmin.
- Auditointiryhmä suosittelee, että TAMKin laatutyössä kiinnitetään enemmän huomiota opiskelijoiden rooliin tutkimus-, kehitys- ja innovaatiotyössä.

Avainsanat

Arviointi, auditointi, laatujärjestelmä, laadunhallinta, laatu, korkeakoulut, ammattikorkeakoulu

Sammandrag

Utgivare

Nationella centret för utbildningsutvärdering

Publikation

Audit of Tampere University of Applied Sciences 2016

(Auditering av Tampereen ammattikorkeakoulu 2016)

Författare

Eva Werner, Robert Coelen, Anne Ahkola-Lehtinen, Luis Carvalho, Antti Saaristo, Matti Kajaste och Kati Isoaho

Nationella centret för utbildningsutvärdering har genomfört en auditering av Tampereen ammattikorkeakoulu (TAMK) och har beviljat yrkeshögskolan en kvalitetsstämpel som gäller i sex år från och med den 14 mars 2016. Tampereen ammattikorkeakoulus kvalitetssystem uppfyller de nationella kriterier för kvalitetshantering som fastställts för högskolor och motsvarar de europeiska principerna för och rekommendationerna om högskolornas kvalitetshantering. Föremål för auditeringen var Tampereen ammattikorkeakoulus kvalitetssystem som yrkeshögskolan tagit fram utifrån sina egna utgångspunkter och mål. Auditeringsobjektet som yrkeshögskolan kunde välja fritt var utbildningsexport (global education). Kvalitetssystemets viktigaste styrkor är:

- TASO- och resultatavtalsprocesserna har skapats genom utförligt arbete, vars syfte har varit att föra samman två kulturer och system efter sammanslagningen av Pirkanmaan ammattikorkeakoulu och Tampereen ammattikorkeakoulu. Kvalitetssystemet har sin grund i dessa processer som stöder väl utvecklingsarbetet vid yrkeshögskolan.
- Kvalitetshandboken Kompassi och intranätets struktur som en plattform för kvalitetshantering för alla interna intressentgrupper är väsentliga med tanke på kvalitetssystemet och hur det fungerar.
- Personalen är starkt engagerad i långsiktigt kvalitetsarbete och detta utgör en viktig del av yrkeshögskolans kvalitetskultur.

Tampereen ammattikorkeakoulu ges bland annat följande rekommendationer för vidareutveckling av kvalitetssystemet:

- TAMK har byggt upp ett omfattande och heltäckande kvalitetssystem som producerar mycket information. Det verkar som om yrkeshögskolan inte kan hantera och utnyttja all data som insamlas. Auditeringsgruppen rekommenderar att TAMK väljer de enkäter och andra datainsamlingsinstrument som tillhandahåller den allra viktigaste och mest användbara kvalitetsinformationen och frångår dem som inte ger TAMK direkt nytta. Det bör alltid stå klart för vilket ändamål data produceras, hur det ska utnyttjas och om det är användbart. All uppföljningsinformation behöver inte produceras varje år, tvärtom kan ett längre intervall öka betydelsen och användbarheten av t.ex. respons.
- I intervjuerna framkom olika och varierande tolkningar av kopplingen mellan aktiviteterna som berör internationalisering och utbildningsexport och deras funktion på TAMK. Det kom t.o.m. fram olika syner på TAMK:s vision. Auditeringsgruppen rekommenderar att TAMK arbetar vidare med att skapa en gemensam syn på internationalisering och utbildningsexport och att dessa aktiviteters ställning i TAMK:s kvalitetssystem definieras tydligare.
- Auditeringsgruppen rekommenderar att man i TAMK:s kvalitetsarbete fäster mer uppmärksamhet vid studerandenas roll i forsknings-, utvecklings- och innovationsarbetet.

Nyckelord

Auditering, högskolor, kvalitet, kvalitetshantering, kvalitetssystem, utvärdering, yrkeshögskola

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Description of the audit process and the Finnish higher education system

1.1 Audit targets

The target of the audit is the quality system that Tampere University of Applied Sciences (TAMK) has developed based on its own needs and goals. The focus of the audit was the procedures and processes that the institution uses to maintain, develop and enhance the quality of its operations. In accordance with the principle of enhancement-led evaluation, the audit did not evaluate the higher education institution's (HEI) objectives, the content of its activities or its results. The aim of the audit is to help the institution to identify strengths, good practices and areas in need of development in its own operations.

FINEEC audits evaluate whether an institution's quality system meets the national criteria (Appendix 1) and whether it corresponds to the Standards and Guidelines for Quality Assurance in the European Higher Education Area¹ (ESG). Furthermore, the audit evaluates how well the quality system meets strategic and operations management needs, as well as the quality management of the HEI's core duties and the extent to which it is comprehensive and effective. In addition, FINEEC audits focus on evaluating the institution's quality policy, the development of the quality system, as well as how effective and dynamic an entity the system forms.

Tampere University of Applied Sciences chose "*Global Education*" as its optional audit target. As samples of degree education, the UAS chose the Degree programme in Business Administration and the Master's Degree programme in Management of Health Care and Social Services. As the third sample of degree education, the audit team chose the Degree programme in Energy and Environmental Engineering.

¹ Standards and Guidelines for Quality Assurance in the European Higher Education Area is available at www.enqa.eu/pubs_esg.lasso.

The audit targets of Tampere University of Applied Sciences:

1. The quality policy of the higher education institution
2. Quality system's link with strategic management
3. Development of the quality system
4. Quality management of the higher education institution's core duties:
 - a. Degree education
 - b. Research, development and innovation activities (RDI), as well as artistic activities
 - c. The societal impact and regional development work²
 - d. Optional audit target: Global education
5. Samples of degree education:
 - i. Degree programme in Business Administration
 - ii. Master's Degree programme in Management of Health Care and Social Services
 - iii. Degree programme in Energy and Environmental Engineering
6. The quality system as a whole.

A set of criteria that is based on a scale of four development stages of quality management (absent, emerging, developing and advanced) is employed in the audit. The development stages have been specified for each audit target and they are determined individually for each audit target. The optional audit target is not taken into account when evaluating whether the audit will pass.

1.2 Implementation of the audit

The audit is based on the basic material and self-evaluation report submitted by TAMK as well as an audit visit to the institution on 10–12 November 2015. The audit team also had access to electronic materials, which are essential in terms of the institution's quality management. The key phases of the audit process and the timetable are included as Appendix 2 of this report.

As chosen by TAMK, the audit was conducted in English by an international audit team. Prior to the appointment of the audit team, TAMK was given the opportunity to comment on the team's composition, especially from the perspective of disqualification.

The audit team:

Eva Werner, rector, IMC University of Applied Sciences, Krems, Austria (chair)

Robert Coelen, professor, Stenden University of Applied Sciences, the Netherlands (vice-chair)

Anne Ahkola-Lehtinen, advisor, Finnish Federation of Technology Industries, Finland

Luis Carvalho, accreditation analyst, University of Porto, Portugal

Antti Saaristo, development manager, Aalto University, Finland.

² Including social responsibility, continuing education, open university of applied sciences education, as well as paid-services education.

Matti Kajaste, senior advisor from FINEEC, acted as the responsible project manager and secretary of the audit team and **Kati Isoaho**, senior advisor from FINEEC, as the backup for the project manager.

The audit visit to TAMK was conducted as a three-day visit. The purpose of the audit visit was to verify and supplement the observations made based on the audit material of TAMK's quality system. The programme of the visit is included as Appendix 3 of this report. The audit team drafted a report based on the material accumulated during the evaluation and on the analysis of that material. The audit report was written collaboratively by the audit team members and by drawing on the expertise of each team member. TAMK was given the opportunity to check the factual information in the report before the report was published.

1.3 The Finnish higher education system

The Finnish higher education system is comprised of universities and universities of applied sciences³ (UASs). All universities engage in both education and scientific research and have the right to award doctorates. The UASs are multi-field, professionally oriented higher education institutions. They engage in applied research and development (R&D) that supports education and regional development. The UAS system was established in the early 1990s.

Higher education institutions (HEIs) operate under the governance and steering of the Ministry of Education and Culture (MoEC). Universities and UASs receive most of their funding from the MoEC, and the activities of HEIs are steered in practice by four-year performance agreements with the Ministry. The only exceptions are the National Defence University under the Ministry of Defence and the Police University College under the Ministry of the Interior, as well as Åland University of Applied Sciences under the local government of Åland (Landskapsregering).

Finland has not yet adopted a national qualifications framework (NQF). However, the Government Decree on University Degrees (2004) and the Government Decree on Polytechnics (2014) define the objectives, extent and overall structure of degrees. HEIs select their own students in Finland. However, national regulations stipulate some general principles for student admission (e.g. the equal treatment of applicants).

The educational responsibilities of the UASs' are stipulated in their operating licences. Universities of applied sciences provide bachelor's and master's degrees. The UAS bachelor's degree consists of 180, 210, 240 or 270 ECTS credits (equivalent to three to four years of full-time study), depending on the study field. It comprises basic and professional studies, elective studies, a practical training period and a bachelor's thesis or final project.

³The Ministry of Education and Culture (MoEC) and the National Board of Education refer to UASs as "polytechnics" in their documentation.

The UAS master's degree consists of 60 or 90 ECTS credits (one or one-and-a-half years of full-time study). Applicants eligible to apply for a UAS master's degree programme must hold a relevant bachelor's degree with at least three years of relevant work or artistic experience. The UAS master's degree comprises advanced professional studies, elective studies and a final thesis or final project.

The focus of the educational provision of universities of applied sciences is on bachelor's degrees. UASs also provide vocational teacher education leading to a teacher qualification. Their teacher education is aimed at those who already have a higher education degree in the relevant field.

UASs decide on the detailed content and structure of the degrees they award. They also decide on their curricula and forms of instruction. In addition to this, some fields (e.g. midwife education) have detailed regulations to some extent for the structure and/or content of the degrees awarded. UASs also actively cooperate on curricular issues under the Rectors' Conference of Finnish Universities of Applied Sciences.

The organisation of Tampere University of Applied Sciences

Tampere University of Applied Sciences Ltd is running Tampere University of Applied Sciences (TAMK). TAMK's organisation consists of five operations: Education and R&D, Business Operations and Services, Development and Quality Management, HR Services, Higher Education Services. Furthermore, there are Higher Education Services at TAMK. The organisation of TAMK is illustrated in Figure 1.

Tampere University of Applied Sciences falls under the Polytechnic Act. The UAS has 716 FTE employees and around 10,290 students. The numbers of students, degrees awarded and employees are presented in the Table 1. At the time of the audit, TAMK was organised into seven schools:

- School of Wellbeing and Social Services
- School of Business and Services
- School of Construction and Electrical Engineering
- School of Art, Music and Media
- School of Industrial Engineering
- School of Health Care
- School of Vocational Teacher Education

Tampere University of Applied Sciences Ltd is owned by the City of Tampere (87 %), Town of Ikaalinen (1.5 %), Town of Ylöjärvi (1.5 %), Sastamala Municipal Education and Training Consortium (9 %), Tampere Music College Foundation (0.5 %) and Tampere Household School Association (0.5 %).

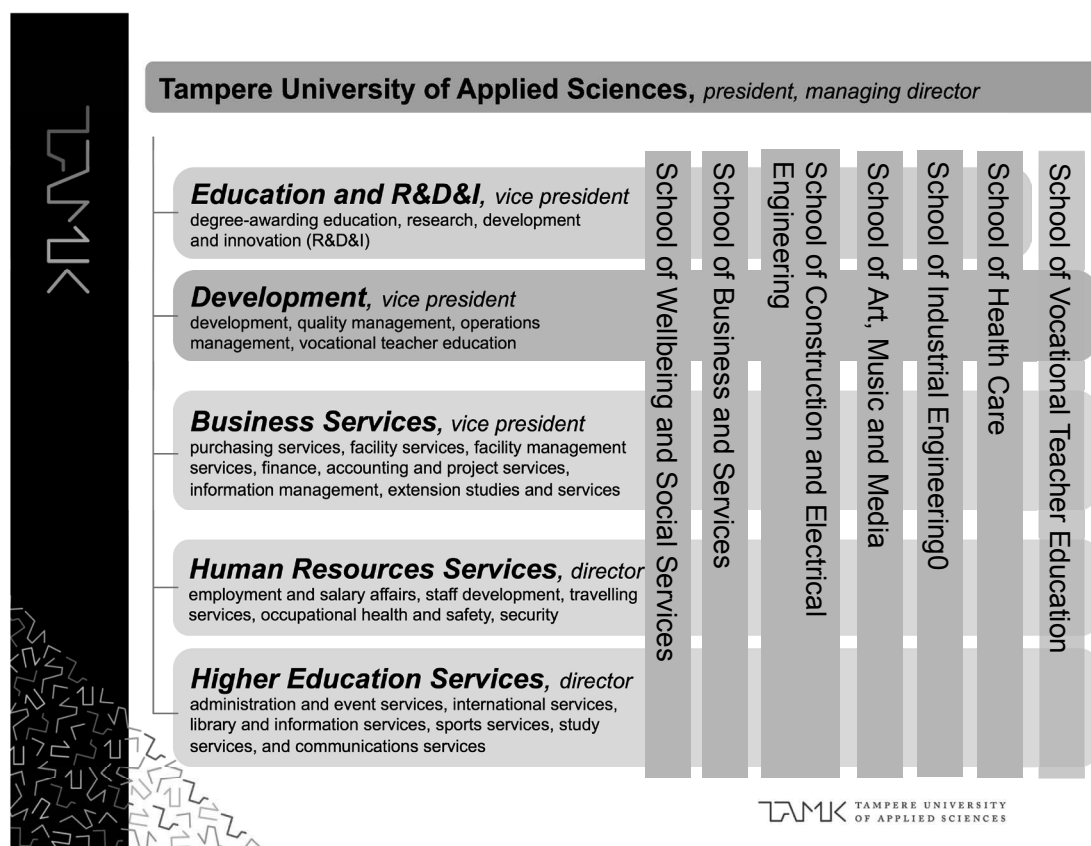


FIGURE 1: The organisation of Tampere University of Applied Sciences

TABLE 1. Basic statistics on TAMK

Students (Full-time equivalent) *	Number
Bachelor's degree	6,564
Master's degree	270
Degrees awarded *	Number
Bachelor's degree	1,456
Master's degree	203
Staff (FTE) *	
Teachers	400,8
Research staff	20,6
Other staff	294,8

* Statistics from the Ministry of Education and Culture, 2014.

The quality policy of the higher education institution

The quality system of TAMK in its current form is the outcome of a vast and inclusive process completed in 2010 that necessitated the design of a quality system serving the needs of the newly merged institutions. Responsibilities are clearly defined and divided among specified groups on different managerial and operational levels, and this ensures the inclusiveness of the quality management process across the institution. However, comprehensive and concise information on individual roles still needs streamlining and strengthening in order to limit the scope of interpretation. Stakeholders and their views are integrated through a comprehensive system of surveys and feedback, the results of which are handled in the annual evaluation process.

The amount of information produced by the quality system is huge, with a tendency to overload the system. Various other tools and channels are also used to ensure accessibility and effective communication on quality issues to, and good practices for, staff, student and external stakeholders. The linkage of TAMK's quality policy to the institution's overall strategy and strategic goals is assured through the annual internal performance agreement process called TASO process based on the PDSA cycle (Plan – Do – Study – Act) as overall framework for the further development of its quality management and all operations.

*The quality policy of Tampere University of Applied Sciences is at a **developing** stage.*

3.1. Rationale, objectives and division of responsibilities

The quality policy of Tampere University of Applied Sciences is laid down in the quality manual *Compass*, the key document for TAMK's quality work and quality system. *Compass* defines TAMK's quality policy in the context of the European Higher Education Area as well as the quality system's objectives. The rationale for the institution's quality policy is to steer all key activities towards the attainment of TAMK's mission "we work for the best of our students' and working life" and the promises resulting from this mission given to internal and external stakeholders with a quality system "aiming at establishing an operational culture which enables evaluation of personal work performance and related continuous learning and development" (from self-evaluation report).

Thus, the quality system comprises all procedures, processes and systems (particularly feedback systems) used by the institution to further develop the quality of its key operations.

As the key quality principle of the institution's quality work is "continuous evaluation and the development of operations based on received feedback" (from self-evaluation report), TAMK has established an internal annual performance agreement process called TASO, based on the PDSA cycle (Plan-Do-Study-Act) as an overall framework for the further development of its quality management and all operations, as illustrated by Figure 2 below. The functionality of the quality system is continuously evaluated, with an extensive internal evaluation taking place every three years.

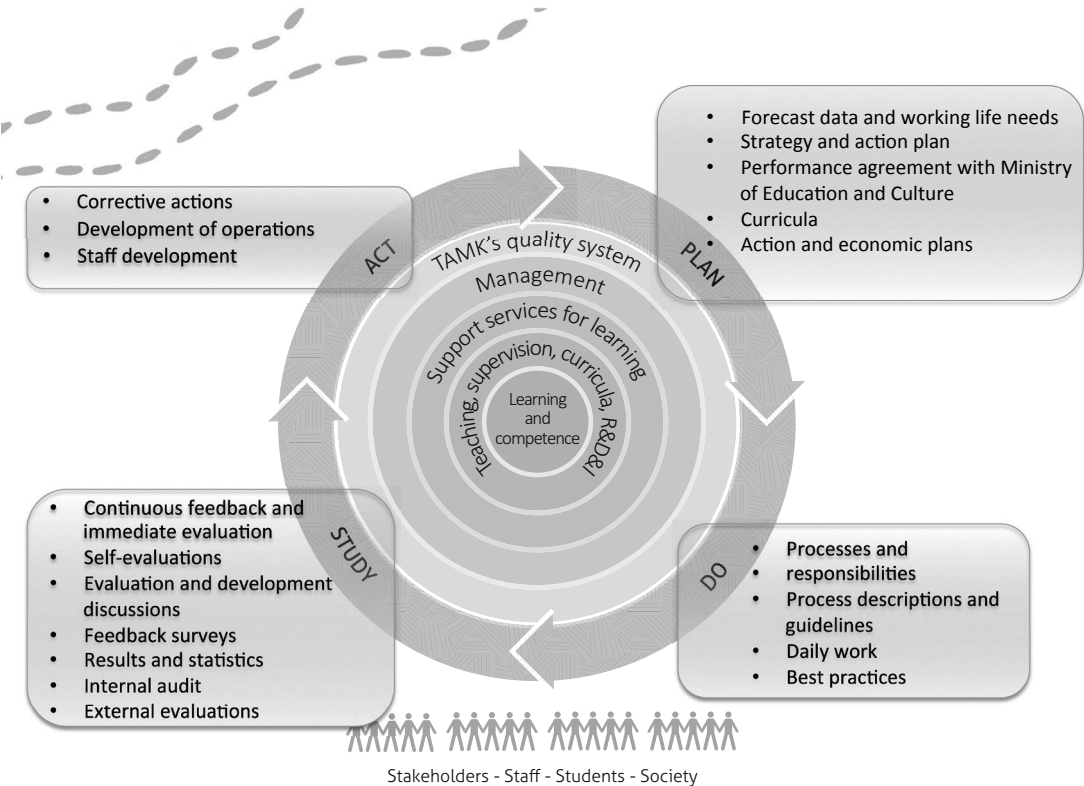


FIGURE 2: TAMK's Quality system. Source: Self-evaluation report August 2015

One of the key challenges in the process of establishing a quality system stemmed from the fact that TAMK is the result of a merger of two institutions bringing along with different quality cultures as well as quality systems. This fact necessitated not only a thorough analysis of the two systems, but also an extensive process of discussion and dialogue, which was undertaken as an inclusive, institution-wide process. As an outcome of this process, the Working Group on Quality Management (WGQM) was set up as a key driver for the development of the quality system. Even though the main task of the group – to set the objectives of the quality system – was completed in 2010, the group still plays an important role in integrating quality management practices into the institution's operations. Thus, the group prepares, coordinates and supports the further development of the quality system as an expert group.

During the interviews, it became evident to the audit team that TAMK's internal and external stakeholders know about the importance of quality work and are strongly committed to contributing to this work. The TASO process was unanimously mentioned as important support and a relevant driver in the quality work of the institution, as were the annual performance agreement meetings and discussions for setting the objectives of the individual units and staff members. The comprehensiveness of the TASO process can be considered as an example of good practice.

The overall responsibility related to quality management lies with the Board of TAMK, whose tasks are outlined in *Compass*. Although the Board has a decisive role, it is the Executive Board that acts as an information, discussion and preparation forum, exercising a strong influence on the strategic direction of the institution. Furthermore, the responsibilities of vice-presidents, directors, heads of units and line managers are also laid down in the regulations of *Compass*. Due to the merger process, the division of responsibilities saw several changes and revisions during the years 2011 and 2014, with now divided amongst several persons and corresponding rules and regulations as of 2014.

Quality and its development are considered to be tasks of all staff members, and various sub-working groups take over responsibility for specific areas such as theses, practical training, etc. The chairs of several of these subgroups are members of the WGQM. Students confirmed that they are represented in "all groups relevant for them", which constitutes an evident strength of TAMK's quality system.

Though the division of quality responsibilities among several groups and persons is clearly regulated and underlines the institution's conviction that quality work is the task of all staff members, TAMK admits in its self-evaluation report that both comprehensive information on the responsibilities and an understanding of individuals' roles are still challenges.

In the interviews during the site visit, the audit team could experience that TAMK's staff and stakeholders demonstrate a clear understanding of the need for quality work as well as everyone's contribution to and responsibility of it, but that the scope of variance in interpretation has a tendency of too much individualisation and thus might require even stricter systematisation.

3.2. Communication of the quality policy

The quality policy, the quality system objectives as well as underlying principles, regulations and guidelines can be found in the *Compass*, which is available for students and staff on the TAMK intranet. *Compass* is a comprehensive document comprising all information available on all fields of the institution. Based on the principle of openness, survey and feedback results that do not contradict privacy and data protection rules can also be found in the intranet portal.

The information and documentation provided in the *Compass* is topic-oriented with detailed and functional descriptions and regulations serving the needs of all internal stakeholders. All information essential for students can be found in the Study Guide and from the student desktop Pakki. Line managers' forums as well as management groups and staff meetings are also used to communicate actively on quality policy issues and objectives; furthermore, TAMK's staff days, which are held twice a year, and *TAMK's Infos*, held five times a year, are also important dissemination forums for information for internal stakeholders on institutional quality system's issues. External stakeholders can find all relevant information on the institution's website. They are also well represented in the 25 Advisory Boards that enable direct communication between TAMK and the region. The Advisory Boards even had a key role in development of the quality policy.

The amount of documentation and data generated by the quality system and its processes is vast and comprehensive, with a tendency to overload the system as well as the people in charge of processing and streamlining the information produced. Indicators are checked at periodic intervals based on the data produced by the system and evaluated according to the set targets. In the interviews, the audit team learned from students and staff that feedback, surveys and the dissemination of good practices are considered the main communication channels for quality work and are executed at regular intervals. Feedback and results from surveys are taken as an essential basis for the further development of courses, curricula or services, yet students admit that they tend to refrain from giving feedback, as they do not always receive information on outcomes or feedback on their suggestions. A more systematic approach to handling students' feedback should therefore be developed.

Members of the Executive Management Team and the WGQM reassured the audit team that they receive relevant and sufficient data and information necessary for monitoring TAMK's strategy as well as the institution's quality work, but also admitted that screening and possibly reducing the amount of information produced with a view to fitness for purpose should be undertaken in the near future.

3.3 Link between the quality policy and the institution's overall strategy

After the merger in 2009, TAMK started its operation on 1 January 2010 with a strategy for the "new" institution covering the period 2010–2019. In an inclusive evaluation process engaging internal and external stakeholders, the original strategy was revised, taking into consideration the effects of environmental changes on the institution's operational fields.

With a view to TAMK’s vision for 2020 to be “the leading UAS in Finland for global education”, internationalisation and commercial education are considered as key drivers for the enhancement of quality, particularly the quality of education.

The linkage between strategy, the quality system and quality development is made concrete through the TASO Process (see section 3.1), which is based on the PDSA principle and translates the strategic objectives into operational actions underlined by a set of indicators. Due to a close follow-up assessment of TAMK’s strategy and the defined focus areas the set of indicators was revised in August 2015, communicated to all stakeholders in the various forums and working groups, thus forming a valid basis for the strategic quality work for the coming years.

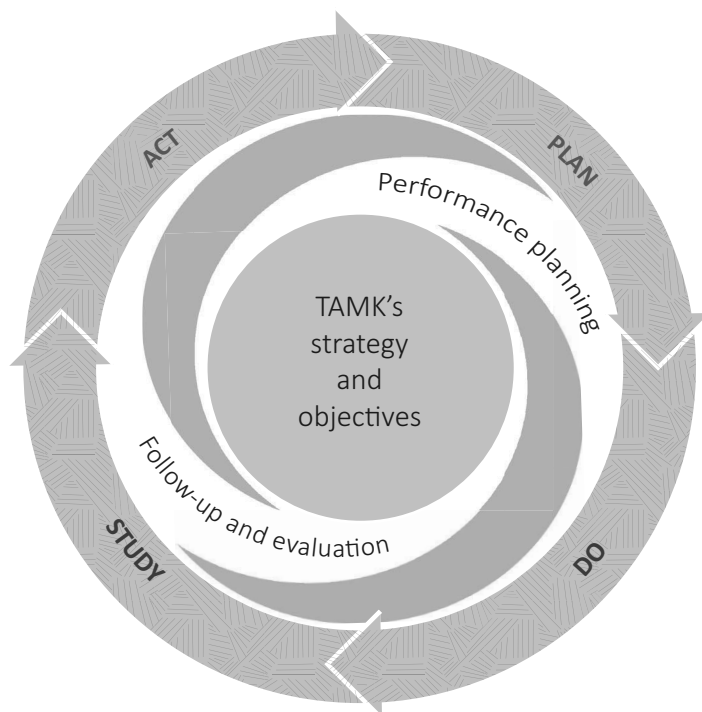


FIGURE 3: Quality system’s link with strategic management; Source: Self-evaluation report, August 2015.

This process, supported by extensive management training as well as staff development schemes, emphasises continuous feedback on the attainment of the objectives as well as corrective actions resulting from periodic evaluations.

All interviewed groups of TAMK’s staff at all levels emphasised the importance of the TASO process both for their quality work and the constant targeting of the institution’s strategy, and convincingly expressed their satisfaction with the support that the TASO process deploys for their individual work.

Quality system's link with strategic management

TAMK's quality system covers the whole organisation and produces and processes information to serve strategic and operational management at all levels of the organisation. The procedures and support systems ensuring that the information is used effectively and systematically, and that university-level strategic decisions are translated into concrete tasks and roles across the organisation, are currently becoming stable and well-established. TAMK puts a lot of effort into communicating information produced by the quality system openly and transparently to internal and external stakeholders.

The development needs relate to simplifying the system of collecting and disseminating feedback and other information relevant for quality development. Clear strengths include the ability to engage external stakeholders, especially the Advisory Boards, in TAMK's quality work and the widespread and enthusiastic commitment to quality work across the organisation. Also, the Service Street concept is an exemplary concept. The development needs in the quality system's link with strategic management relate to further systematisation of quality work in all the units.

*The quality system's link with strategic management is at a **developing** stage.*

4.1 Information produced by the quality system for strategic management

The quality system of Tampere University of Applied Sciences is clearly and widely understood as an integrated part of the overall management system. The quality system describes the main operational processes and provides information for evaluating and developing these processes. The focus of the quality system is largely on collecting feedback in numerous ways from the community and stakeholders to identify possible problems, development needs and best practices.

The ability to produce relevant information concerning TAMK's operations is widely experienced at the UAS as a particular strength of the quality system. The quality system is also admirably open and transparent; the majority of information collected is made available on the intranet, and the members of the TAMK community are well aware of this.

The interviewees stressed that TAMK's quality system aims to find a good balance between efficient utilisation of quantitative performance indicators and a deep appreciation of a qualitative understanding of what is going on behind the indicator values at all the different units. Accordingly, TAMK's quality system involves a number of thematic working groups, committees etc. that process qualitative information to complement the quantitative indicators.

The comprehensive system of such groups is integrated into TAMK's quality system and, thereby, TAMK's management system. In addition to the sound appreciation of subject-specific qualitative information, TAMK's top management also expressed a healthy fidelity towards the role of quantitative indicators in strategic decision-making and management.

It is difficult to avoid the impression that the system of collecting information and feedback, and perhaps even the complicated architecture of different working groups and information and discussion events, may have grown somewhat organically and accordingly might benefit from further systematisation. TAMK should consider focusing on a smaller number of input channels and analysing and disseminating the information collected in a manner that feeds more directly and systematically into strategic management processes. Currently, the quality system provides almost too much information in too many unit-specific ways, which may make it difficult to form an informed overall picture and to ensure that development ideas are implemented and followed up with equal dedication across the organisation. This need to systematise or even harmonise further the quality processes is recognised in TAMK's self-evaluation report. It was also confirmed frequently in the interviews.

The self-evaluation report as well as the interviews testify that the UAS is well aware of these kinds of pressures to harmonise and systematise certain links between its quality system and strategic management. Likewise, the audit team fully appreciates the healthy caution TAMK demonstrates in implementing penetrating harmonisation and systematisation measures: TAMK is the result of a merger and the UAS in its core values is committed to respecting the differences between the different parts and traditions within it. The balance between the harmonisation of processes on the one hand and respecting and even encouraging diversity on the other is something TAMK needs to address constantly when developing its practices and ways of working. In particular, one needs to ask whether the current balance is strategically chosen and consciously developed, or whether the current situation is rather based on how successful the harmonisation ambitions expressed by TAMK's top management have thus far been. The impression the UAS gives to an outsider is that there might still be room for further harmonisation and systematisation of processes related to the quality system and strategic management without compromising the valued diversity in the content of the core activities.

The TASO process is seen as the key tool for supporting the required systematisation. TAMK has continuously developed the process on the basis of feedback and experiences, e.g. by simplifying follow-up mechanisms, by fine-tuning the timetable for performance negotiations and by integrating the budgeting process into the TASO process. The TAMK community is already quite satisfied with the bottom-up way in which the TASO process accumulates information from the grassroots to the level of strategic management, as well as how it operationalises strategic objectives from the top down, from the institution-level to concrete goals for units and even

individuals in their annual development discussions. With the planned support systems, the TASO process is currently approaching a mature development stage where it can be expected to fully fulfil the role required from it.

4.2 Functioning of the quality system at different organisational levels and units

The TASO process is the backbone of TAMK's annual management cycle, and also the most general manifestation of the Plan–Do–Study–Act cycle that is at the heart of TAMK's quality system. The TASO process incorporates the different organisational levels and units into an annual, integrated quality assurance and management cycle. The interviews at TAMK confirmed that the role of the TASO process is well understood and accepted across the UAS. However, the general willingness to rely on shared quality management mechanisms appears to gradually weaken when one moves from TAMK's executive board and the education directors to the more remote units.

In particular, some of the smaller units appear to rely in their quality management primarily on their long tradition, sometimes stemming from the pre-merger era, of open and informal feedback discussions within the unit. In some cases, this approach appears almost to leave the formal quality system underutilised and underdeveloped. While the tradition of open discussion is an asset for the whole UAS, an overemphasised reliance on direct feedback and direct reaction threatens to make the quality system reliant on the personal attributes of the individuals that are currently holding central positions in these units. This would make the quality system and its processes unnecessarily fragile and even disconnect the local quality culture from the shared, UAS-wide quality system and strategic management.

A particularly strong feature of TAMK's quality system is the involvement of external stakeholders in quality work. The audit team was especially impressed by the manner in which TAMK's Advisory Boards were integrated into the quality system. The contribution of the Boards supports strategic as well as operational management at the UAS. The Advisory Boards have a well-thought-through, thematic programme that is communicated to the members in advance, making it possible to prepare properly for the meetings. The Boards are also given regular follow-up information concerning the development of the themes they have already advised on. The practice of bringing the Boards, and especially the chairs, regularly together was mentioned as very beneficial, both for the Boards themselves and for the TAMK management.

The well-managed Advisory Board practices connect TAMK's strategic management well with the most important regional stakeholders. Also, the dialogue between the degree programmes and the Boards appeared to function in a mutually beneficial way: in the interviews, the audit team heard several examples of how the integration of Advisory Boards in the quality system has resulted in important development measures.

Moreover, a notable feature of the quality system and its link with strategic management is that TAMK's four regional higher education representatives, six relationship managers, the key TAMK representatives in international networks as well as the representatives of the TAMK student union

are members of the relevant working groups. This practice not only ensures that information and feedback from stakeholders finds its way into TAMK's quality system and strategic management processes, but also that the information also flows smoothly in the other direction.

4.3 Quality culture

The interviews made it clear that the TAMK community is very quality-conscious and highly committed to quality work: high quality and continuous development of operations is emphasised throughout the organisation. The institution-level quality system is widely experienced as empowering: the system supports the development work of e.g. TAMK's teachers. However, in their own estimation, TAMK is still developing a shared quality culture for the whole institution. Currently, the different traditions of the different fields and parts of TAMK make the quality culture somewhat multiform. While this is partly supported by TAMK's commitment to encouraging diversity, there appears to be a widespread ambition to move towards a more unified quality culture and champion diversity in the content of TAMK's academic work, rather than in terms of a number of quality traditions.

TAMK advances a more unified quality culture by emphasising openness, transparency, broad participation and the role of diverse teams in quality work. For example, the WGQM (the key body in TAMK's quality work) has members from throughout the UAS. TAMK also promotes a wider understanding of TAMK's quality system among external stakeholders.

A laudable example of TAMK's participatory quality culture is the "Ei Paha!" project to develop a new service culture for TAMK's Support Services after the merger. The interviews showed that the project has succeeded in creating a quality culture where the service functions analyse customers' needs and feedback together in order to create a better customer experience. The aim is that the service functions understand the needs of their customers so comprehensively that, in most cases, it suffices that the customer contacts one service function, after which it is the service organisation, and not the customer, that integrates services to meet the customer's needs. This ability to proactively tailor the services according to the needs of customers, instead of forcing customers to adapt to the structure of the service organisation, is a result of clear-sighted development work based on the advanced quality culture in the TAMK service organisation. The great manifestation of these successes is the Service Street, which the TAMK community is quite justifiably proud of. The Street physically combines all forms of student support services into one location, making them easily accessible for all students.

Development of the Quality System

Tampere University of Applied Sciences uses functioning methods for the evaluation and development of the quality system. The quality system has been systematically developed since the two universities of applied sciences merged. In the evaluation of its quality system TAMK emphasises the importance of external evaluations side by side with its own evaluations. By means of the methods presently in use, the strengths and development targets can be clearly recognised. The development of the quality system has produced results, and clear development targets have been utilised in evaluations. The feedback from students is utilised and the students participate actively in the development of the feedback methods. External and internal evaluations have been widely used in the development of the quality system.

TAMK utilises a number of procedures for evaluating its quality system and for recognising the system's strengths and weaknesses, and there is plenty of evidence of successful development of the system. However, there is sometimes a risk that the development work remains unnecessarily patchy, thus it should be more decisive and less evasive of streamlining and harmonisation actions.

*Development of the quality system is at a **developing** stage.*

5.1 Procedures for developing the quality system

TAMK evaluates and develops its quality system continuously on the basis of the data provided by internal and external evaluations. The most comprehensive internal evaluations of the quality system are TAMK's internal quality evaluation exercises, which cover the whole quality system and all the quality management processes. These evaluations are carried out every three years and follow the FINEEC criteria.

Other internal evaluation mechanisms are formed by the TASO process and the continuous evaluation activities of the Working Group on Quality Management (WGQM) and its members. The working group coordinates the development of the quality system and decides which improvements are made on the basis of the feedback given. The WGQM was established after the merger of the two institutions and has been working systematically ever since as the driver of TAMK's quality

work. The group members decide how the feedback is collected and how the changes are carried out in practice. This work has been performed systematically since the internal audit in 2012. According to the self-evaluation report, the group is striving to improve the feedback system so that it gives feedback on the quality system development at all levels. Individual members of the WGQM have been given specific responsibility areas, and they are continuously evaluating, on the basis of feedback and accumulated experiences, the functionality of the quality system and any possible development needs in their designated responsibility areas.

The TASO process is aimed at forming the development goals to better follow the strategy targets. The TASO process is also instrumental in the annual evaluation of the quality system itself: the process includes a reflexive or self-evaluative dimension where, on the basis of all the feedback collected, the functionality and appropriateness of the quality management mechanisms embedded in the TASO process are assessed. This way, experiences of and data on the functioning of the quality procedures are utilised as part of the overall development process of TAMK. The audit team considers this to be a good practice, since linking the quality system development to the TASO process ensures the annual scrutiny of how well the quality procedures are fit for purpose. According to the self-evaluation report (SER) and interviews, the TASO process itself and the tools used are also developed annually with the feedback from all directors and managers at TAMK.

The main channels for integrating an external perspective into the development of the quality system include, in addition to comprehensive quality audits such as the present exercise, the systematic use of external Advisory Boards in TAMK's development work and benchmarking exercises focusing explicitly on the quality system carried out e.g. with the University of Tampere and Tampere University of Technology.

In the development of the quality system, the launch of the new intranet in 2013 has increased the integration of quality work in everyday activities. Including the quality manual *Compass* on the intranet has improved its usability and made it more open for everyone. Data is collected systematically through evaluations and feedback enquiries, but according to the self-evaluation report, the analysis and utilisation could be more comprehensive. Analysis of the feedback given by the students, especially at the beginning of their studies, should still be developed. Better utilisation of the course feedback and the annual improvement and development activities are considered important development targets. The fact that TAMK has clearly recognised the need to streamline the feedback system is evidence of the ability to identify problems in the quality system.

A similar streamlining need relates to the fact that currently the reporting practices of different service functions, even when part of the same review process, are somewhat multiform. TAMK has identified this as a development target and, accordingly, plans for introducing new, shared support mechanisms, such as a data warehouse, are currently being drafted. Similarly, the current transition from manually publishing reports on the intranet to automated, real-time reporting in the reporting portal can be expected to form an important development step in TAMK's quality system.

5.2 Development work after the previous audit

The TAMK quality system has been continuously developed since the merger of the universities. WGQM and the management team are in control of the quality work. The quality documentation and *Compass* are constantly being updated and developed to meet the operation model of the new united TAMK. The present quality system is the result of active development activities. The development targets are being recognised using the evaluation and feedback methods. After the merger, the feedback system for students has been considerably developed. The participation of the students in the development of the quality system has been activated by including them in different committees and workgroups. Communication with external interest groups has improved but is still under development. Stakeholder co-operation has been developed since the previous audit by, for example, defining TAMK's stakeholder groups and the relationships with them in 2014. In addition, according to the self-evaluation report, reporting on results and feedback on the core duties of the UAS was developed in 2013–2014.

TAMK is taking part in discussions on the university T3 merger project, in the context of which also the restructuring of the information systems and updating of the quality systems will be crucial. Overall, TAMK uses a variety of tools and procedures for the development of its quality system as part of its overall management system. There is plenty of evidence of the system's ability to gather data to identify procedures that could potentially work better. However, some persistent problems linger. For example, the UAS has not yet selected decisively enough those quality management procedures that benefit it the most or, more importantly, ceased utilising those feedback questionnaires and other quality management tools that it does not gain enough from. The audit team encourages TAMK to begin this streamlining in the near future.

In accordance with TAMK's history as the merger of two earlier universities of applied sciences, a particular development target in TAMK's quality system has always been to create a unified TAMK quality system and quality culture. To support this goal, TAMK's development work emphasises openness, transparency, broad inclusiveness and the role of diverse teams in quality work. The audit visit made it evident that, although there are still features reminiscent of two separate quality systems and accordingly room for decisive streamlining actions in TAMK's quality system, in a certain sense the approach chosen for developing a shared TAMK quality culture has been highly successful: the TAMK community is remarkably committed to – and even enthusiastic about – quality work and creating a shared TAMK way of doing things.

Quality management of the institution's core duties

6.1 Degree education

TAMK's quality management procedures related to the planning and implementation of degree education, as well as to the attainment of qualitative and quantitative objectives, are functional and provide good support in both the planning and implementation of the degree programmes. The objectives and related indicators are derived from and linked to TAMK's overall strategy. All processes and procedures are embedded in the TASO process, and the relevant guidelines, manuals and information material can be found in Compass. Internal and external stakeholders play essential roles in TAMK's quality work.

TAMK's system comprises an extensive set of feedback channels and surveys, generating a huge amount of data and information, which should, however, be critically reflected on, eventually decreased in number, simplified in complexity and reviewed as to periodicity. The quality management of key support services functions well.

*The quality management of degree education is at a **developing** stage.*

Objectives of degree education

The strategic goal for degree education (first and second cycle) stems from TAMK's vision for 2020 to be "Finland's leading University of Applied Sciences for global education." *Strategic objectives* are therefore not only aligned with those agreed with the Ministry of Education and Culture, but also with those that further the achievement of this vision. They cover:

- TAMK's focus areas;
- internationalisation;
- future competencies;
- customer relations and partnerships.

They are based on the rationale of:

- promoting the quality and effectiveness of learning and the studying process;
- creating diversified learning environments and flexible learning possibilities, taking into consideration the increasingly digital operating environment;
- integrating RDI with learning and education;
- offering curricula that anticipate and regenerate working life;
- continuously developing staff competencies.

Following the PDSA cycle, the operational objectives – both qualitative and quantitative – are set for each school and their degree programmes in TAMK's Action and Economic Plan, which underpins the strategic development themes mentioned above. Furthermore, each school and each degree programme can bring in specific objectives derived from stakeholder feedback. Apart from setting the objectives, the performance planning process also defines measures of achieving them and the budget, as well as follow-up and evaluation of the attainment of the set objectives. Regular reviews of results and indicators, self-evaluation of degree programmes, and managerial meetings are used to check (study) the progress towards the achievement of the set goals and defines measures (act) for further development actions. During the interviews, it became clear that TAMK has put the students and their development through high-quality programmes at the focus of their activities, with competence orientation as the guiding principle of the curricula.

Functioning of the quality management procedures

The essential quality management procedure for TAMK's degree education is the TASO performance planning process, which, according to the institution's self-evaluation report as well as the statements made by the members of different interview groups during the site visit, furthers the development of target-oriented, degree programme-specific objectives, as well as the coverage of follow-up through an annual evaluation and planning process.

The TASO process encompasses as major steps the setting of objectives, measures to achieve them, and allocation of budget funds, as evaluating the attainment of the set objectives indicators and feedback surveys constitutes an essential ingredient in quality management procedures. TAMK has set up a comprehensive list of strategic and operational indicators for the different institutional units and operational fields, as well as an extensive range of surveys and feedback channels that generate information and data for the quality management of degree education.

Key performance indicators for degree education follow the *strategy follow-up 2015* which was undertaken in spring 2015, and relate to broadening the range of source of finance, the effectiveness and quality of the study process, and diverse learning environments. The indicators are bundled in groups according to target units and provide information on data sources, follow-up intervals and information responsibility.

The responsibility for the attainment lies with the directors of education and the steering-group of degree-awarding education on the one hand, and with the heads of degree-programmes on the other. The periodicity of the indicators' evaluation as well as the periodicity of the feedbacks and surveys is laid down in the *Compass* together with the indication of the information source, the defined follow-up interval and the person responsible for providing information.

Furthermore, degree regulations and related guidelines as well as curricula and implementation plans constitute essential parts of the quality management of degree education. As competence orientation is the guiding principle for the development of all curricula, a systematic approach to defining intended learning outcomes aligned with the different competence levels and international learning outcomes, as well as 21st-century skills, still needs to be developed and integrated into the quality management of degree education in order to serve TAMK's strategic development themes of future expertise, internationalisation and digitisation in all programs. TAMK has implemented an extensive feedback system that covers students, staff and stakeholders, the outcomes of which are utilised for setting the objectives for the coming year. Feedback channels for students are defined in *Compass* and comprise course feedback, development discussions, and annual programme feedback, as well as non-procedural methods, such as a commendations page on the intranet.

As for staff, there are also various feedback channels that feed into the development discussions, the outcomes of which are then translated into development activities based on the development needs detected. The feedback from business and working life stakeholders is collected through meetings, feedback discussions and surveys, as well as through RDI partners and the Advisory Boards, whose members discuss evaluation results and education indicators, thus creating a bridge between degree education and the needs of research and working life. Internal feedback and surveys are conducted systematically at defined intervals based on a detailed feedback and survey plan; external surveys such as the Trendence Graduate Barometer complement this plan.

The procedures, tools and indicators used for the quality management of degree programmes are firmly rooted in the institution through the TASO Process, and, according to the directors of education and programme heads interviewed during the site visit, constitute valuable tools to support them in steering, evaluating and further developing the individual programmes. In some cases, however, they still show differences and allow deviations from the uniform quality management of the programmes, as was mentioned in the self-evaluation report and also confirmed in the interviews. Yet, TAMK's responsible persons are aware of this fact and are determined to even out these inconsistencies by setting clear standards, e.g. for course implementation plans, course information and definitions of assessment criteria. It also became evident in the interviews that the periodicity of information production was seen as critical and to prevent an overflow of information. TAMK should therefore critically reflect on the intervals of their indicators' follow-up periods to allow them to use the information produced to its full extent (and not become lost in the data).

Information and data generated are used in the annual evaluation process and often produce direct effects, as was mentioned in the interviews with members of different groups (staff, students) – particularly feedback stemming from course evaluations and students' feedback. Evidence of the successful use of information and data to enhance the quality of the programmes can be seen in the work and outcome of the multi-professional counselling groups, where students, staff and support services jointly develop the study process and progress of studies, as well as in the use of the feedback from Advisory Boards, which strongly impacts curriculum development and curriculum redesign.

Yet, even though the interviews provided evidence that feedback is regularly discussed in staff meetings and used to improve the programmes, both the self-evaluation report and the interviews also gave clear evidence that the high number of surveys and the resulting excessive amount of data, as well as the periodicity of the data collection mechanisms, need to be subject to further reflection and streamlining. Furthermore, all discussions and key conclusions from student feedback evaluations should be regularly systematised and made available for consultation with students and staff.

Participation in quality work

Quality work is considered, according to the self-evaluation report, as an everyday task for everybody; thus, various working groups, directors, staff, students and stakeholders take an active role in the various feedback cycles and surveys, with support services also being integrated into this process.

According to the self-evaluation report, commitment might vary due to an overflow of information which cannot always be “digested”; nevertheless, the interviews showed that “all of TAMK” considers quality work as the basis for the further development of the institution and thus demonstrates an impressive *quality spirit* and overall high commitment to quality and quality work during the site visit.

TAMK has set up a dense feedback system in order to involve students in quality work. Students are at the focus of the overall programme improvement process and are represented in several working groups. This “student-centeredness” in terms of paying attention to their needs and integrating them into all relevant processes can be taken as an example of good practice.

As to response rate in surveys, students are somewhat reluctant to fill in survey and feedback questionnaires and often seek the “direct way” – making contact with lecturers. Although this opportunity to choose a short and informal way is highly appreciated by the students, it entails the risk of deviations (as mentioned above) and “individual solutions” that might hinder the acquisition of a comprehensive view of areas in need of development; they should not, therefore, completely replace systematic feedback.

Feedback from employers offering placements is sought, yet not systematically embedded. Feedback from alumni could also be used more systematically for the further development of degree programmes. Thus, it is recommended to develop adequate and systematic involvement of these stakeholder groups. As already mentioned, RDI partners as well as Advisory Boards

play an essential role in quality management work. The commitment of the latter to the further development of the programmes was particularly impressively demonstrated during the interviews – their involvement and how well TAMK manages to integrate the members of these boards into its quality work can be regarded as examples of good practice.

When asked to evaluate the workload quality procedures generate for their work, representatives of staff and programme heads replied in the interviews that they appreciate the processes in place, in particular the TASO Process and the related Management Year Clock as they help them to plan their own tasks without getting overloaded. Quality work is considered an essential part of management work, and the awareness of quality management procedures among the staff of the degree programmes as crucial for active commitment. TAMK continuously promotes discussions of quality issues through joint meetings and working groups, thus helping to keep extra workload stemming from “uncertainties in practices” as low as possible.

Quality management of key support services

Key support services comprise services for both students and staff; the quality management procedures of the centralised support services are the same regardless of who the customer is. Evaluation of the services is conducted through feedback surveys, customer experience measurements, mystery shopping methods, failure reports and the newly introduced multi-professional counselling groups, where school staff, student counsellors and support services staff jointly discuss and develop relevant processes; projects are used to develop new ideas for better services. Thus, the outcome of a project called “*Ei Paha*” was the creation of a *Service Street* collecting all student services and some staff services “in a line”, easily accessible and user-friendly. This Service Street is not only an innovative idea, but also *an example of good practice* and good cooperation among the services.

6.2 Samples of degree education

6.2.1 Degree Programme in Business Administration

The quality management procedures related to the planning of educational delivery provide excellent support for the planning of the programme. All relevant stakeholders, including students, Advisory Boards and staff, participate in the ongoing systematic development of the programme. The recent curriculum revision has taken an overarching view to produce the best possible outcome. Much effort has gone into creating a truly student-centred approach to teaching and learning. The use of constructive alignment of teaching, learning, assessment and learning outcomes greatly facilitates the management of the quality of the implementation of the programme. The processes established for managing the quality of implementation are well-established. The quality work has had a clear and decisive impact on its development.

*The Degree Programme in Business Administration is at an **advanced** stage.*

Planning of education

The aim of the Degree Programme in Business Administration (210 ECTS credits) is to provide students with an overall view of the skills and competences needed in business life today. Students are able to avail themselves of a number of study paths that represent a degree of specialisation. The degree programme is available to study both full-time and part-time.

An extensive revision of the curriculum took place in 2005 in which all stakeholders, including the professional field, academics, students and alumni, were consulted. This resulted in the development of working-life abilities and meta-skills as curricular components, in addition to sector-specific knowledge. A more recent revision of the curriculum took place in 2010–2013. This revision was supported by a number of frameworks and guiding documents, bringing the merged, competence-based curricula (from two separate institutions) in line with current procedures of TAMK.

Many of the activities described – such as the thematic student learning process (‘me’, ‘we’, and ‘it’), the formation of learning enterprises, and the responsibility that students take (under guidance) for their own learning and development – demonstrate a high level of commitment to student-centred learning. This is one of the central tenets of the use of learning outcomes and produces a “flipped curriculum” that is based on outcomes instead of input. However, an even stronger articulation of the learning outcomes (LO) together with a constructive alignment of assessment and learning materials would further enhance quality management.

The extent to which students are assessed on cognitive aspects, from reading the stated LOs of courses, is substantial. Given the emphasis on teamwork and real-life working skills, there is a development opportunity to have more affective and psychomotor-related learning outcomes being assessed. For example, evenly distributing workloads between team members, increasing stress management skills, and timetable management are all considered important aspects of first-year student development. The integration of these aspects into all teaching will enhance the ability to use quality management for these facets. Whilst the substance knowledge is considered important by the business field, “transversal skills” are considered increasingly pre-eminent. A convenient marriage of these transversal learning outcomes with those of internationalisation would greatly enhance the embedding of these aspects as LOs. There is a good level of reaction to feedback from students, and the interaction with the Advisory Board on shaping the curriculum can be considered a good practice. Equally, the progression from simulated or virtual business (e.g. “Kykylakso”) to actual projects and work is an excellent example of developing real-world learning for students. Feedback from companies, international contact, benchmarking during international staff visits, and staff visits in companies are all used to develop the curriculum. Enhanced interaction with alumni for curriculum development is underway and will further contribute to the relevance and up-to-date nature of the programme.

Another important aspect of today’s business field is its international nature as a result of increased globalisation. Quality management procedures can be further enhanced to ensure that Internationalisation at Home and Internationalisation of the Curriculum become even stronger features of the programme and its development. International benchmarking and internationally minded or foreign companies can be important allies to provide additional impulses for quality management.

The link between RDI and the programme is a natural one by virtue of the project studies and their link with real working life. Nevertheless, at the highest level of these projects (the thesis project), the self-evaluation report reveals some concerns in respect of grading and public availability of theses. The grading differences are being addressed with further training. The scheduling of projects and their coordination have required a response in the form of work flexibility. Confusion about the constraints under which projects are available have been addressed in part with information sessions. Teachers have been asked to spend more time on planning and executing these projects.

The connection between other prior studies and the degree programme remains a complex one, and there are differences in the assessment of the extent of prior learning, depending on who applies the testing. The Open UAS pathway is still under development, and the connection with the current first-year learning model requires more work.

A vast array of information is brought to bear on guarding the extent of the relevance of the degree programme to the professional field. This makes the absence of explicit transversal skills in the LOs somewhat surprising. This may be a matter of the programme focusing on paying attention to this aspect in all its contact with external parties in respect of the education of students who are part of the programme. For example, the assessment of a period of practice placement by the employer could ask specifically (if it does not already do this) how well the student performed in a team, what their critical contributions were to the development of an in-company project, etc. It may be a simple chicken-and-egg situation, where making such aspects (e.g. in the psychomotor and affective domains) explicit will fuel further deliberate attention and allow for further alignment of LOs with professional needs.

Implementation of education

The programme appears to have been very reactive to suggestions for improving delivery. This has put elements such as real-world learning, the link between RDI and education, and methodology such as problem-based learning (PBL), and project learning through teamwork at the forefront of the delivery of education. This is laudable. Indeed, the online learning environment created for first-year studies in which real-world learning is more simulated than real appears to be excellent preparation for real-world learning. The programme has availed itself of the opportunities of digitisation, which are aptly demonstrated by the availability of virtual courses and videoconferencing. The IT process of Kykyläakso continues to be developed. Students are introduced to the objectives of the programme or components thereof at the outset of studies. Lecturers have sufficient time for further development during the year. Good contact with companies during internships ensures the relevance of in-company work. The lecturers appreciate team teaching for its benefits and mostly possess a good balance between experience of working life and an academic background.

International collaboration, as introduced in marketing and financial administration together with foreign partner institutions, has created virtual international mobility. This is a current best practice and will benefit from additional development. Collaboration with students from other disciplines at the InnoEvent is also a good practice and should be further encouraged. This

represents real-world learning at its best. It also presents unique opportunities to further develop the social responsibility involvement of students of this programme together with students from disciplines where this is a more easily defined fit to the curriculum.

A point of development would be the enhanced alignment of assessment with intended learning outcomes. This could go hand-in-hand with making the internationalisation learning outcomes in the domains of international awareness and intercultural effectiveness (together with 21st-century skills learning outcomes) a more explicit part of the curriculum. Defining the learning outcomes in the current understanding will also enhance the, already well-present, student-centred nature of the programme.

Effectiveness of quality work

The quality work has had a clear impact on the development of the programme. Indicators of improvement include the uptake of project studies and the altered role of teachers as coaches (which augurs well for the implementation of student-centred learning); their willingness to change the way they work also emphasises their level of commitment. The quality indicators include feedback, job placements, information from the Advisory Board and alumni, as well as progression and completion statistics. There is evidence of good curriculum development. There are also sufficient measures to continue the development of the curriculum from the perspective of content, delivery, and the teaching and learning environment. All relevant stakeholders participate in the quality work, and together they create a massive amount of data. It may require the programme to assess this volume and the frequency with which it is generated in order to manage this process more optimally.

6.2.2 Degree Programme in Energy and Environmental Engineering

The quality management procedures are well organised, and both internal and external stakeholders contribute actively to the improvement of the programme, as was exemplified by the last curriculum reform, which incorporated numerous inputs and feedback from all relevant groups. Responsibilities are transparently attributed, and information easily accessible. Nevertheless, the implementation of quality processes could still be improved in its effectiveness by decreasing, for instance, the too numerous feedback channels and eliminating the partially too individual approach.

*The quality management of the Degree Programme in Energy and Environmental Engineering is at a **developing** stage.*

The Degree Programme in Energy and Environmental engineering (240 ECTS credits) prepares students with up-to-date knowledge, planning and managerial competences in the field of environmental engineering. The number of applicants is very high, and normally only one in five candidates is admitted. Instruction is provided in English, and more than 50% of the students are from outside Finland. Attesting the international orientation of the programme, every year nearly 20 students experience a mobility period outside Finland. On average, students conclude their studies in less than four years, the lowest graduation time in comparison with other similar

programmes from the School of Industrial Engineering. During the first year-and-a-half of the studies, teaching is more discipline-centred, while the final courses are project-based and the students work more independently.

Quality management related to the planning of educational provision

The curriculum was reviewed between 2010 and 2013 with consultation of external stakeholders as the central element of the curricular reform. Questionnaires addressed 35 organisations, from the business sector to NGOs, consultation with the programme's Advisory Board and an interview with a Member of the European Parliament specialising in environmental issues were also made. The new curriculum entailed significant changes for students and teachers since student-centred teaching and communal learning (i.e. increased integration of courses, team teaching, and coaching-based teaching) became prominent in the programme. However, both the self-evaluation report (SER) and the interviews pointed out some still existing obstacles to the full implementation of the new curriculum, since not all teachers had completely assimilated the new pedagogic dynamics. While the curricular reform was markedly influenced by external members, it should be stressed that future reforms ought to promote equivalent involvement from both internal and external members. Evidence was presented that not all teachers have yet implemented the necessary changes required for the new curriculum, and students held divergent views on the merits of the new curriculum. For example, the students were somewhat unhappy with content repetition in some courses, and mentioned that not all teachers were equally capable of promoting team teaching. Yet, given how new the curriculum is and how drastic the change in teaching methods is, this is expected to develop accordingly. Nonetheless, in accordance with TAMK's well-established practice, each course has an implementation plan where the essential information about the course is easily accessible, with learning outcomes, assessment criteria and teaching methods.

The importance of RDI in this programme is exemplified by the 30% increase in credits acquired through RDI projects (2011–2014). Additionally, the *Project Studies Course* offers students the chance to engage in a course that is common to the whole School of Industrial Engineering. Students work in teams with colleagues from other programmes which creates a learning setting that provides multidisciplinary and practical experience in a simulated professional environment. The effectiveness of this course was evaluated and documented, a practice that the audit team considers very noteworthy and that should be adopted also in other programmes of the institution. In addition, there is a strict policy that requires all RDI projects to be capable of integrating students. Theses are developed in working life-related projects, but the SER also mentioned prevailing safety issues and difficulties with the confidentiality of projects with external partners. Consequently, it is advisable that TAMK improves its agreement policy with external partners to safeguard the best interests of students in the development of their work. Lastly, the Advisory Board plays an important role in enabling the connection with the professional world, and their continuous activity facilitates the identification of research areas that require further investigation. Working life perspectives are also collected through questionnaires targeting employers and alumni.

Quality management related to the implementation of educational provision

An implementation plan is devised for each course in advance. The interviews with students, however, suggested that the breadth and quality of the plans varied considerably among teachers. The programme should consider harmonising its practices here, especially considering that curriculum includes team teaching, a didactic approach that is more demanding in terms of coordination between teachers, namely in defining assessment criteria.

Throughout the programme, students have plenty of forums to appraise their educational experience (e.g. course and annual feedback, and informal discussions with teachers – particularly in the annual meeting promoted by the Globe student club). Nonetheless, response rates to feedback surveys are low, a common problem at TAMK. According to the interviews both students and teachers agree that the yearly meeting stimulates a fruitful discussion about the major areas that need improvement reflecting the functioning quality culture of the programme. However, alternative mechanisms to evaluate the programme should not be overlooked. The formal mechanisms should also work efficiently since, for example, some students may be more comfortable with giving anonymous feedback. Also, it is possible that the Globe meeting is not as feasible in the future if the student population continues to grow.

The Degree programme in energy and environmental engineering has implemented a noteworthy practice of choosing precise areas of improvement every year. For instance, the English skills of lecturers and the availability of practical placements were identified as priority areas requiring improvement. Evidence was provided that corrective measures were adopted to ameliorate those issues (e.g. promoting English language training for staff, and gathering available placements into a database that students can assess to locate practical training possibilities).

Especially international students have difficulties to find practical training positions. While this is a common problem in Finland, further efforts are encouraged to help students to integrate into Finnish companies. Regarding the thesis work, there are also some difficulties with the collection of feedback from external partners. If this shortcoming is already being addressed, it is crucial to develop an efficient procedure that allows working life members to evaluate and comment on students' performance and progress during their thesis work.

Each student has the possibility to have a teacher tutor that can provide support in both academic (e.g. preparing study plans) and personal issues (e.g. student counselling), however, not all students are fully aware of this service being offered. Concerning teaching, the audit team would also like to recommend the programme to conduct a longitudinal evaluation of the impact of the new coaching-based instruction on students' achievement and satisfaction. This systematic assessment needs to be properly documented in order to support an incremental and sustainable improvement of this laudable pioneering approach.

According to the audit material and interviews, teachers have opportunities to continuously improve their competences, for example through pedagogic training on coaching. Another important procedure for evaluating teachers' progress and development needs is the annual development discussions, embedded in TAMK's larger strategy of conducting annual cycles of evaluation (the

TASO process). In fact, the TASO process facilitates the definition of new development objectives for the programme and, as a result, annual target indicators are set and continuously monitored to guarantee that the objectives are being met (e.g. annual achievement of 55 ECTS credits).

Effectiveness of quality work

Student and staff participation in quality work is a well-established practice in the Degree Programme in Energy and Environmental Engineering. There are regular meetings where feedback and the programme's indicators are analysed and discussed. When necessary, corrective measures are taken in response to the most pressing problems. Students provide feedback, but they also discuss the issues at the annual meeting of the Globe student club. On TAMK-level, it would be useful to improve the capacity to track students' paths after graduation, namely those that move away from Finland. While the current alumni network is a useful practice, a more comprehensive mechanism would undoubtedly provide useful information to the UAS on students' career tracks and capacity to find work. This information could be instrumental to further enhancing the programme, namely in terms of employability.

Finally, since no students have yet graduated from the new curriculum, an impending priority for the programme should be a sound evaluation of the new curricular reform, specifically the added value of the coaching teaching approach and team teaching.

6.2.3 Master's Degree Programme in Management of Health Care and Social Services

The quality management procedures of the master's degree programme in management of health care and social services are systematic and provide strong support to the development of education. Curriculum development is supported by a comprehensive set of procedures that guarantee its professional relevance. Both internal and external stakeholders contribute actively to improving the quality of the programme. There is clear evidence of the impact of the development work in the programme.

*The quality management of the Master's Degree Programme in Management of Health Care and Social Services is at an **advanced** stage.*

In this degree programme (90 ECTS credits) students develop competencies in management and evidence-based working practices in order to integrate multi-professional teams in the field of social services and health care. The number of applicants in this programme largely supplants the available places (25). Enrolled students bring along at least three years of professional experience and often combine their studies with their own job. The average time of completion is around two years, and it has even fallen in the last five years (from 2.72 in 2010 to 2.13 in 2014). According to the National student survey OPALA, most graduates (70%) get managerial positions after graduation. The relatively small group of students experience a combination of classroom-based lessons (two or three times per month) together with independent and group work. Some students have went on short periods of international exchange, but the levels of student and staff international mobility can be expanded.

Quality management related to the planning of educational provision

In agreement with TAMK's *Compass*, the curriculum is reviewed periodically. The last review took place in 2014 and incorporated input from various internal and external sources. From a theoretical perspective, the relevant literature and policy documentation in the field was used as a source of best practices and state-of-the-art research. Alternatively, as confirmed in the audit visit, the Advisory Board provided an external view that was well incorporated into the curriculum development. This is a well-established practice in TAMK that fosters the participation of representatives from working life and provides information on competencies required in the professional arena. In addition to the internal mechanisms to monitor the achievement of curriculum goals, a Joint Advisory Board (with ten representatives from the working life and one student representative), meets at least twice a year to ensure that curriculum development serves the needs of working life.

Each course is prepared a year in advance, allowing a timely distribution of work and schedule planning. Implementation plans summarise the most relevant information about each course (content, learning outcomes, teaching methods and evaluation criteria) and are easily accessible to students through the Study Guide on the intranet. Information provided for each course is comprehensive yet could be harmonised in its wording to even further strengthen the competence-based curriculum which was developed in line with TAMK's strong emphasis on integrating students into working life.

The School of Health Care is actively seeking third-party funded projects to increase the amount of external collaboration that can integrate students and enhance project-based learning, a strategic priority for the programme. In 2015, the School of Health Care hired a project planner and a relationship manager, thus increasing the School's capacity to reach out to working life and helping teachers to increase the number of collaboration projects where students can improve their professional competences and acquire practical and RDI experience, especially during their thesis work. It is important that these partnerships can be officially established to guarantee the maintenance of TAMK's active external collaborations.

Students can test and develop their ideas through the Project Idea Basket, a laudable initiative to foster an innovative mindset. They also have support in writing proposals and implementing the projects from teachers with specific time allocated to these tasks. Some students have even concluded projects with entities such as the City of Tampere, MYI University of Japan and FinnMedi. Students receive timely information about the possibilities to integrate research and development projects by using databases with all the placements available.

Quality management related to the implementation of educational provision

The programme's goals are set every year (e.g. increasing international mobility, students completing 55 ECTS credits) – in harmony with the larger development objectives of TAMK. The achievement of the goals is continuously monitored through the TASO process. Learning activities are diverse (e.g. seminars, group work and study visits) and theses are developed in a working life/professional environment. Since the last curriculum redesign, there has been an effort to shift the learning paradigm towards inquiry-based methods and evidence-based practices. To support this

orientation to a more student-centred approach, teachers had opportunities to receive training to improve their pedagogic skills (especially coaching) and IT competencies. The development of professional competences and staff wellbeing are addressed during teachers' annual development discussions, where annual objectives are set in line with TAMK's strategic goals.

In addition to the information outlined in the implementation plans teachers also explain in detail how each course is organised and how students are assessed. The audit team considers this as sound evidence of transparency in a student-centred education. Student assessment is multifaceted and test-taking is seldom used. Instead, students are encouraged to perform self and peer evaluation, receiving tailored feedback from other students and working life supervisors. Team work is common and therefore an evaluation rubric is used, where both students and the teacher provide feedback on the project. The audit team would welcome further attempts to take into account the students' professional experience to pursue "new operational models for health care", a flagship expertise area for TAMK.

Feedback is a cornerstone of quality management at TAMK. In this programme, annual and course feedback allow students to evaluate the achievement of learning outcomes and teaching quality. Annual surveys show that students find the curriculum relevant and appropriate. Students' feedback is particularly significant in this programme, since the students often carry on their studies in parallel with their jobs. Consequently, they can give first-hand testimonials about the relevance of what they have learned.

Student counselling is available, and teacher tutors are assigned to assist students in the organisation of their study plan (e.g. through the annual HOPS discussions) and to assist them in any issue related to their wellbeing. Students are expected to conclude their studies in one-and-a-half years. However, since most of the students study and work at the same time, more time is actually needed to conclude the thesis and students highly appreciate the tutoring they get.

Effectiveness of quality work

The master's degree programme is supported by a comprehensive system that is highly participatory, both internally (students and staff) and externally (Advisory Board, alumni). Several indicators demonstrate that goals of the programme are monitored and met (e.g. annual feedback, OPALA). There is clear evidence of the quality management procedures having an effect on the programme. For example, the amount of credits awarded has been harmonised according to the feedback received from students. According to the interviews, there is a shared understanding between the staff and the students on the most important development targets of the programme, which reflects the close relationship between these groups. The impact of the new curriculum should be evaluated, especially given the transition to a more competence-based form of education where coaching and project-based learning play a key role. The quality management procedures of the programme in place are plentiful and effective, opportunities for continuous improvement are regularly provided through students' feedback and the information of students about the outcomes of their provided feedback.

6.3 Research, development and innovation activities, as well as artistic activities

TAMK's quality system for RDI activities supports the strategic goals defined for TAMK's RDI operations and promotes a culture where the impact of RDI work is proactively guided in the desired direction. The information provided through the quality system is used to develop the RDI activities further. The TAMK community and the main external stakeholders are actively engaged in the quality work. The quality of the support services is constantly assessed and effectively managed. The quality system of the RDI activities is comprehensive and detailed, and the recent development actions that are currently being implemented are taking the system from the building phase to a steady state of continuous development and enhancement.

*The quality management of research, development and innovation activities, as well as artistic activities, is at a **developing** stage.*

Functioning of the quality management procedures

TAMK defines the objectives of its RDI effort on the basis of the Polytechnics Act. Accordingly, TAMK's key objectives in this area include developing the skills and competencies of the UAS staff, developing the working life skills of the students in authentic working environments through integrating the RDI effort into education, promoting collaboration with external stakeholders, strengthening international activities with strategic partners, and generally increasing the volume of RDI activities.

The schools are responsible for integrating RDI activities into studies. The key service unit supporting this task is R&D and Education Services, which administers most of the RDI projects. RDI activities have their own quality indicators and performance targets, but their quality management is also connected to the quality management of degree programmes. The key quality management mechanism for school-based RDI activities is assessment and development in the context of the TASO process.

The steering of RDI activities towards the institutions strategic priorities is managed by TAMK's focus area groups, which have members from the schools and R&D and Education Services and are chaired by a director of education. The work of the different focus area groups is coordinated by a coordination group chaired by TAMK's vice president.

In addition to these main bodies, there are a number of working groups contributing to the quality management of TAMK's RDI activities. The Curriculum Working Group assesses the use of Learning Projects (i.e. student projects funded mainly by degree programmes) as learning environments for students, e.g. by measuring credits earned in RDI projects. This indicator was frequently referred to with approval in the interviews. This seems to suggest that TAMK's culture of openness and trust, supported by the presence of many working groups processing qualitative information behind the numeric indicators, also penetrates the use of indicators, for in many other institutions, and indeed nationally, this indicator has been rejected on grounds of unreliability and manipulability.

The RDI and Teaching Integration Working Group aims to harmonise the methods used in Learning Projects involving students in order to ensure that the same quality levels are achieved across the institution without undermining the diversity required by the different fields TAMK represents. The heads of degree programmes have a large role in selecting the Learning Projects to be implemented. The feedback from Learning Projects is collected together with TAMK's course feedback process. Summary reports of feedback are available from the Reports system, and a more systematic and thorough process for processing feedback at the degree programme level as part of the TASO process is currently being developed.

These quality mechanisms are recent and ongoing developments, and the integration of RDI projects into education is still a work in progress. In particular, the interviews revealed that the students' awareness concerning the learning opportunities offered by research projects, and indeed concerning the role of research in their studies in general, varies considerably. The students also generally find it difficult to integrate research projects into their study plans.

In the case of RDI projects managed by R&D and Education Services (mainly externally funded projects) and the Development Unit (typically internal pedagogical development projects) a key body is the Project Idea Evaluation Group, which consists of members of TAMK's executive management and assesses the importance of project ideas and their alignment both with the UAS's strategic objectives and with the objectives of potential external funders. Also, the integration with education is considered. Additionally, the group serves to increase the awareness of top management of the RDI activities at the schools. In line with TAMK's commitment to openness and transparency, the project proposal forms, as well as the criteria for evaluating proposals, are available on the intranet.

When a project idea is approved by the Project Idea Evaluation Group, R&D and Education Services support the process of compiling a project proposal for external funding bodies. After the funding has been granted, the work hours required for the project are fitted to the work plans of the participating teacher. TAMK's Project Services together with Finance and Accounting Services support the execution of the project and participate in its quality management. RDI projects also have steering groups to support quality management. Project managers also collect feedback from the external partners involved in the RDI project. When a research project is terminated, the feedback is summarised and assessed in an internal feedback meeting and reported to the UAS's R&D director.

By requiring researchers to evaluate explicitly and formally already *ex ante* also the regional impact and relevance of their proposed research, as well its potential for being integrated into education, TAMK's quality system promotes an RDI culture where researchers as a matter of course adopt a very proactive approach to regional impact, integration into education and similar strategic priorities. In this aspect, TAMK's quality system for RDI activities is quite advanced: When it comes to the evaluation and quality management of the societal impact of research, the international community is currently shifting from retrospective assessment to prospective creation and management of research impact. TAMK's RDI quality system has already largely taken this step.

Thus, the Project Idea Evaluation Group, as well as the Focus Area Groups, function largely as gatekeepers ensuring that only projects with content that advances TAMK's strategic priorities are permitted to go ahead. This guides TAMK towards a strongly strategy-driven research culture. This might appear almost to work against the goal of maximising the external funding for RDI activities. This goal, accentuated by the fact that the most important RDI performance indicators are quantitative volume indicators, appears to direct the RDI effort towards an opportunity-driven research culture.

The interviewees representing both the senior management and the research community assured the audit team that this apparent tension within the quality system of TAMK's RDI activities is indeed only apparent: in reality, the RDI community understands that the long-term goal of increasing the amount of external RDI funding requires that TAMK manages to build remarkably strong research competencies and capabilities (and thereby a salient profile) that attract notable external interest. The community was quite unanimous in explaining that, in the context of scarce resources, the only way to achieve this kind of critical mass of research excellence and co-operational competency was to systematically strengthen TAMK's chosen research areas, which in turn requires rather resolute guiding of research efforts into the chosen directions. The qualitative mechanisms for ensuring that the content of RDI efforts adhere to the strategic priorities of TAMK were seen to support in the long run also the ability to attract external funding.

Thus, individuals in different units and at different levels of the organisation were able to explain consistently not only the strategic goals of TAMK's RDI activities, but also how, exactly, the different parts of the quality system advance the strategic objectives. The audit team feels that this shows that in this crucial aspect the basic principles of the quality system are widely understood and accepted, and the quality system for RDI activities functions well across units and organisational levels.

Participation in Quality Work

As described above, internal personnel groups are widely involved in the quality management procedures of RDI activities. In addition to this, TAMK seeks to ensure that regional partners understand the institution's strategic choices in developing its RDI capacity and competences. The Advisory Boards are important for this task, although the interviews revealed that at least some Advisory Boards would be highly motivated to participate even more in the planning and quality management of TAMK's research activities. The committed and dedicated Advisory Boards are, in general, a great asset for TAMK, and the institution should also seek to utilise them even more in its RDI activities.

Some external stakeholders also saw TAMK's ability to generate multidisciplinary RDI projects with external partners as a feature in need of improvement. The example emphasised in the interviews was that external partners would be interested in projects where TAMK's ICT competence is combined seamlessly with the media and artistic competences, but the external partners felt that it is difficult for TAMK to support this kind of internal collaboration. While multidisciplinary activities are, in general, challenging to the discipline-based working culture of higher education institutions, TAMK should nonetheless review carefully its approach to supporting cultural differences among disciplines and other internal cultural diversity to make sure that the approach

is not in fact undermining TAMK's multidisciplinary potential. Similarly, while the system of ensuring in advance that implemented projects support UAS's focus areas and are linked to degree education is in many ways exemplary, TAMK must be certain that its emphasis on clearly focused project proposals also serves its multidisciplinary aspirations.

TAMK's excellent ability to cooperate with the University of Tampere, Tampere University of Technology and VTT Technical Research Centre of Finland was seen by both external stakeholders and by the TAMK interviewees as a notable strength of TAMK's RDI activities. The cooperation with VTT, alongside the strategic placing of TAMK's regional higher education representatives and relationship managers, was also seen to support well TAMK's ability to promote mutual understanding in RDI aspirations between the institution and its regional partners. Also, the introduction of Oiva, the new customer relationship management system, was frequently mentioned in the interviews as a useful improvement in the quality management of external partnership relations.

Quality Management of key support Services

The quality management of RDI activities is thorough, open and participatory, and it involves staff from different levels and different units across the organisation. Feedback is collected meticulously from students and external collaboration partners, and jointly developed indicators are utilised. Expert services support the quality management of project work from the idea stage to the completion of projects, and in the interviews, the members of the RDI community expressed great satisfaction with the support services and how they develop their activities to meet the needs of the RDI personnel. Projects are evaluated in the proposal phase, in the middle of the project, and after the project is completed.

However, as the self-evaluation report also admits, there might be room for further systematisation of the ways in which the diverse feedback is processed, analysed and integrated into strategic and operational management. In particular, the number of different administration and quality management groups involved in the RDI activities appears to be rather large. While this is in line with TAMK's aspiration to spread quality awareness and to promote a sense of community by means of involving a notable number of individuals in the quality work, and the different mechanisms used for project management and quality management support TAMK's commitment to respecting and promoting reasonable diversity, the self-evaluation report also acknowledges that this complex system is difficult to grasp comprehensively and may create gaps where the PDSA cycle is not implemented satisfactorily, e.g. by virtue of unclear or overlapping quality management responsibilities.

It should also be noted that the current form of the quality system for TAMK's RDI work is also a rather recent construction. The quality system is at the stage where the system is simultaneously implemented and streamlined on the basis of accumulating experiences. The interviews also left the audit team with the impression that one of the expressed goals of the RDI policy, the maintenance and development of the skills and competences of the staff of the institution, is a domain that might benefit from more comprehensive quality management. Currently, the issue appears to be left to the individual, annual development discussions (where e.g. the amount of time reserved for RDI work can be adjusted) without reflecting it at the aggregate level.

6.4 Societal impact and regional development work

TAMK's quality system for managing its societal impact and supporting its role in regional development work has been built systematically to involve internal interest groups as well as external stakeholders. The idea behind the quality system is to ensure that information flows smoothly between TAMK and its regional partners, resulting in a deep mutual understanding, and that TAMK is involved in the most important regional networks and development projects. A lot of emphasis is put on guiding TAMK's RDI efforts towards high societal and regional impact and on ensuring the societal relevance of TAMK's educational activities.

The main development needs of the quality system relate to engaging alumni, including international alumni, more with the quality work, and paying more attention to the consistency of the quality procedures relating to practical training placements as well as work commissioned from TAMK's students by regional partners. A larger challenge faced by TAMK, alongside many other higher education institutions, is to develop quality management from the present phase of ensuring that there are many strategically chosen points of contact between TAMK and its external partners, to a phase where the actual results of this cooperation and joint planning are demonstrated and assessed.

*The quality management of societal impact and regional development work is at a **developing** stage.*

Functioning of the quality management procedures

Tampere University of Applied Sciences sees its regional impact work through successful education of professionals for the region and RDI activities arising from regional needs. TAMK also wants to actively increase its impact on the region by linking its activities to the regional strategies. In order to develop these operations, dialogue with different organisations has been initiated, for example with the Tampere Chamber of Commerce and the Federation of Municipalities. The Regional Higher Education Network, coordinated by TAMK, provides higher education services to support regional development, especially in the context of adult education working life services. The representatives of the business world participating in the development activities are motivated to co-operate in TAMK Advisory Boards, thus providing important input on the delivery and content of education degree programmes in order to ensure the employability of TAMK's future graduates.

To support the goal – and indeed the statutory obligation – of regional relevance and close dialogue with regional stakeholders, TAMK has set up a system where it has regional higher education representatives in four local municipalities. In addition to linking TAMK's activities with the regional needs and plans, the regional representatives also participate in regional strategic and forecasting work relating e.g. to the rising education and RDI needs of the region. The regional representatives are also regularly invited to participate in different regional working groups and task forces analysing the future trajectories of the region and its economic life.

Furthermore, TAMK's Schools has six relationship managers in charge of customer relations. Importantly, both the regional representatives and the relationship managers participate broadly in the relevant RDI, education and impact-related working groups at TAMK, thus ensuring a smooth flow of information between TAMK and local stakeholders. The external stakeholders

interviewed by the audit team also emphasised TAMK's close collaboration with VTT Technical Research Centre Finland (as well as with the two universities located in Tampere) as a specific feature that supports TAMK's ability to understand and meet regional needs in a significant manner.

The overall impression given by TAMK's quality management of societal impact and regional development work is that the UAS has considered well-constructed and thought-through a system to ensure ongoing, systematic and relevant dialogue with its regional partners and other stakeholders. The cooperation channels TAMK has established provide the platforms and forums required for strategic co-creation (between the UAS and its regional stakeholders) of the regional higher education agenda. This, in turn, means that TAMK is very well placed to be at the centre of regional development work.

However, from the point of view of an effective quality system it does not suffice to establish the ingredients of outstanding societal impact and the instruments for strategic dialogue with regional stakeholders. The data provided by the quality system should focus also on demonstrating and providing evidence of the actual impact on the region and its development, and not merely on demonstrating the potential for impact (e.g. by giving evidence of the existence of systematic contact with external stakeholders). This step is, admittedly, notoriously difficult for HEIs to take, but the audit team was happy to learn that TAMK has already taken many noteworthy steps in order to develop its quality system in this direction.

The interviews made it clear that the quality system of TAMK's RDI effort is currently moving strongly in a direction where researchers are required to proactively plan and manage the societal impact of their RDI effort in accordance with TAMK's strategic priorities and focus areas. Similarly, the degree programmes have especially integrated the external Advisory Boards into their development work in order to ensure that the external perspective is at the centre of TAMK's development work for the benefit of both students and future employers. Likewise, the extension studies offered by TAMK, which form an important channel of TAMK's regional outreach, are able to utilise the quality management of degree education in this aspect in addition to their own feedback mechanisms.

In general, the interviews conducted during the audit visit highlighted the recent introduction of Oiva, the new customer relations management system, as a significant new instrument in support of the systematisation and management of relations with external stakeholders and partners: The use of Oiva is currently being expanded from contact and project idea management to more systematic processing of partner feedback.

The spreading use of Oiva can be considered an important improvement, for the interviews revealed that in many units, the relations with external partners are based on TAMK staff's personal working life contacts and are managed in a somewhat informal manner. Even though the personal contacts of staff are an asset for the UAS, the management of these activities should be integrated into TAMK's general quality system to ensure consistent quality in TAMK's educational activities. The interviews made evident that this is a pressing concern in the case of obtaining practical training placements with comparable terms and practices for all TAMK students, including international students.

Participation in quality work

The participation of TAMK staff and students in the regional development work is considered as an important development target ensuring future employment of TAMK's graduates and responding to the needs of regional customers. Close, active co-operation helps students to better adjust to business life and thus improve the regional impact of TAMK's education. Operational models, such as periodic meetings and systematic collection of feedback, are offered to former students. The even more systematic involvement of TAMK alumni, including those graduates that are placed outside of Finland, could represent a fruitful opportunity to further develop TAMK's operations to better respond to the demands of the region.

The co-operation with regional actors is active and mutual. TAMK has a broad and considerable network of co-operation partners in the region. It has clearly identified its social and regional responsibilities: in the interviews, the audit team learned about many inspiring examples of student projects that manifest TAMK's awareness of its social responsibility in the region. Likewise, external interest groups consider the co-operation important for the development of their operations, and thus want to increase collaboration. In order to make this co-operation mutually beneficial, TAMK should find a good balance between the interests and activities of its own staff and the needs of working life representatives. In this sense, internships offered and theses commissioned from students by regional companies constitute a valuable link between education and working life, which could be intensified through even stronger support from TAMK as well as systematic documentation of the ongoing operations in the quality system.

TAMK's goal is to be an international actor in the future, and also TAMK's regional stakeholders express high expectations concerning TAMK's potential ability to link regional partners with international networks. Accordingly, TAMK puts a lot of effort into developing its international competence, the main instruments being international projects, international staff exchanges and paid educational services. This is followed up by indicators focusing on the participation of students and staff in international co-operation.

The interviews showed that there is a need to develop the quality system to a direction where it pays more attention to the basic ingredients of TAMK's internationalisation ambitions in order to meet the expectations of external stakeholders in this respect. The reach and level of English language training among TAMK's staff could perhaps have a more central role, such as the integration of multidisciplinary and multinational teamwork into TAMK's learning projects. TAMK's international student community is a considerable asset for TAMK's education and RDI efforts, and the UAS might want to develop its quality system to focus more on these practices. However, in general, the audit team believes that TAMK's international co-operation is good and active, which is a view shared by TAMK's external stakeholders as well.

TAMK has an important role in organising extension studies, including professional specialisation studies and open UAS education, measurement and laboratory services, and development work for companies and other organisations. There are thousands of participants annually and education is given year-round. Feedback is requested from participants in all the courses, and the content of

the courses is renewed on the basis of the feedback received and other accumulated experiences. Teachers understand the importance of the feedback reports and actively strive to use these to revise the content of the courses.

In summary, TAMK's quality system for societal impact and regional development work is at a stage where TAMK has managed to fulfil its strategic goal of placing TAMK "at the junction of regional SME networks" and, even more importantly, into the most essential regional networks of strategic development and forecasting work, such as the Regional Higher Education Network and Pilkahdus. Also, the quality management of TAMK's education and RDI activities are highly responsive to regional and societal needs and seek to nurture the societal impact of these core functions proactively. The great challenge for TAMK is to develop the quality system in such a way that the factual impact TAMK has through its participation in networks and by making its education and RDI efforts more relevant to society can be demonstrated and made visible. Even if TAMK's societal impact cannot be comprehensively and exhaustively measured at the moment, TAMK should seek to assess and demonstrate more rigorously its societal and regional impact.

Quality management of key support services

The interviews made it evident that the TAMK community is, by and large, satisfied with the way in which the international services and travel services, as well as the career and recruitment services, have been able to respond to the growing service needs related to societal impact and regional development work, at least when these needs are related to degree programmes and RDI work. This testifies in favour of the quality system of the support services.

However, in the case of commercial extension studies, which is a relatively novel growth area of TAMK's portfolio, the support services need to develop their quality management to better accommodate the needs of the commercialisation of traditionally non-commercial activities. Given TAMK's strategic aspirations to rapidly strengthen its commercial education activities, this is clearly an area in need of determined development measures.

The quality management procedures for Global Education (GE) are impregnated by those that prevail throughout the rest of the institution. At the same time, due to the present, rather limited size of this particular activity – if interpreted in its strict sense – many additional, at times ad hoc, solutions are created for issues that arise without integration into the overall quality system, thus hampering their full functionality. As GE itself seems – according to the statements during the interviews – to be somehow isolated from the overall internationalisation scheme of the institution, both planning and implementation cannot fully benefit from the system. The small group of people involved in GE is definitely concerned with quality work but wider participation suffers from the isolation of GE from the overall internationalisation scheme. Thus, in order to make quality management procedures and Quality work in GE more functional and supportive, it is crucial to integrate GE as an inherent part of TAMK's overall internationalisation scheme with broad participation of internal and external stakeholders. There was evidence presented in the interviews that the GE quality work has a positive effect, yet there is still potential left to be deployed for the enhancement effect for the overall institutional work.

*The quality management of Global Education is at an **emerging** stage.*

7.1 Functioning of the quality management procedures

TAMK decided to have Global Education as an optional target of the audit. The relationship between Global Education and internationalisation, as determined from the interviews, is such that the two concepts were interpreted variously throughout the interview sessions. This is not surprising, since the two processes derive much from one another. The audit team also chose to touch on both Global education and internationalization in this chapter of the report, with the benefit of the TAMK in mind. Thus, GE was variously credited with engendering the development of a greater level of flexibility, curricular adaptation, and lecturers' sensitisation to foreign cultures, to name just a few aspects. Equally, internationalisation activities caused the development of international student support activities, acclimatisation activities to Finnish culture, and further development of the accessibility to programs by virtue of the English language as a medium of

instruction, amongst other features. The development of GE, whilst presently not involving the delivery of education to fee-paying, degree-seeking students on campus, had been underway in anticipation of the legislative change that has recently occurred. In this sense, it is easy to see the internationalisation activities currently carried out at TAMK as part of the preparation of the organisation for this legislative change. Equally, the interviews revealed that Global Education was already influencing areas of TAMK beyond the GE office in a positive way as preparation not just for the arrival of fee-paying international students, but also as an impulse for the further development of lecturers, educational delivery, and curricular content that benefits all students, international as well as Finnish.

TAMK has set the very ambitious target of becoming the leading UAS in terms of Global Education. Whilst this does not set targets in absolute terms, it does create an environment within which staff are encouraged to think big. Given that the business of educational delivery is part of the core business of TAMK, it is possible to refer to all of the procedures that TAMK uses for the quality management of the delivery of education in general and those of project administration for this optional audit target. It is clear from the interviews that this indeed does apply. Thus, the quality management procedures at TAMK are relevant for Global Education, and the ad hoc procedures developed due to needs in Global Education can be embedded in a systematic way in the quality management procedures for TAMK internationalisation as a whole.

Given the small scale of the GE operation at this stage, the extent to which feedback was instrumental in adjusting curriculum or delivery was excellent, even when multiple partners were involved in the operation. At times, there was concern about communication with partners, but actions were undertaken to resolve any issues. These issues helped to induce further systemisation of procedures.

There is a lot of work going on at TAMK to give greater depth to internationalisation. The actions flow from the inclusion of internationalisation as one of three themes in the 2015–2020 strategy. This strategy, as explained in the document *Internationalisation at Tampere University of Applied Sciences*, is in the process of being developed. In this section of the report, we comment on further development as an opportunity. The guiding principle in developing this opportunity is to, at all stages, answer the question “What is in it for me?” from the perspective of all stakeholders. Thus, to fully develop its internationalisation strategy, TAMK needs to create a manifesto that explains to all stakeholders why it is both desirable and advantageous to internationalise. The explanation is implicit in many actions of the institution, but it needs to be made explicit. The reason for this is simple: the excellent environment of responsiveness to the improvement of quality, as created by TAMK, provides strong focus for all stakeholders, once the reason for action is identified. This is a clear example of how the TAMK quality management can help further develop this area.

One of the challenges for TAMK that was mentioned in the discussion with the teaching staff was the placement of international students. Part of this may be alleviated by explaining to local companies the value of accepting international students as part of their own internationalisation, which, in view of the expected shortage of graduates throughout Europe, will become as necessary in Tampere as anywhere else in Europe. Thus, the stakeholder manifesto should rationalise the

benefits of having international students in the environment: their value as a resource to develop greater global awareness and enhance the intercultural effectiveness of all stakeholders who interact with them. By making this explicit, participants in the learning, teaching and practice environments will find more ways to derive benefits from their presence.

The guiding question must be answered for all stakeholders. If the ability of teaching staff to teach in English is limited, a case must be made as to why this is important and what the benefits are to the quality of education. In other words, unless the motivation for change is explicit, it will be difficult to engender change. Students noticed that, at times, they spoke better English than their teachers, and they felt that the teaching was compromised. The impending legislative change that now requires the institution to charge fees from international (non-EU/EEA) students should provide a great incentive for work on English language skills to be carried out now. Fee-paying international students can bolster the class size of programmes and enhance both the viability and quality of educational offerings, provided that they are available in English.

As was evident in an interview with students, they appreciate the arrival of more international students for the enlargement of the range of views that are present on all sorts of topics. Indeed, students were very appreciative of internationalisation activities in general. This is a very positive and enlightened view, and it defines for them one of the benefits of having international students. However, especially when it comes to fee-paying international students, the availability of a broad range of courses in English is a pre-requisite.

Part of this strategy is to play on the perceived national strengths. Thus, the decision to leverage the excellent reputation for pre-tertiary education of Finland makes sense. It is up to TAMK to define further areas of alignment of national pre-eminence and its own excellence and to use this in positioning TAMK both through the activities of its Global Education section as well as through alignment with relevant local industry and through partnering in international activities.

Whilst the delivery of tailor-made education has been shown to work and to lead to a variety of quality enhancements, courtesy of the current Global Education programme, it will be quite another level of efficiency and gain to deliver existing educational offerings to fee-paying customers. The lessons learned for managing the quality of tailor-made education need to be translated for use in a bigger and more systematic arena.

One strategy that TAMK may wish to adopt is to ensure that it formulates institution-wide learning outcomes in respect of internationalisation competencies (both international awareness and intercultural effectiveness) that are appropriately contextualised in all disciplines. A further enhancement of this strategy is to couple internationalisation competencies with those related to 21st-century skills, which are in high demand throughout all sectors of economic activity. Both these types of competencies often suffer from not being an explicit part of the curriculum whilst the world beyond education voices loud and clear that this is something they wish all graduates to possess. Thus, responding to that call will bring TAMK graduates closer to the requirements of their future employers and will enhance motivation towards internationalisation (and 21st-century skills) as contributing to the qualities of TAMK graduates.

By managing the internationalisation (and 21st-century) learning outcomes through the regular process of curriculum development, it will become much easier to incorporate these into the quality management of the institution. Such an integration will assist in achieving primacy in Global Education, particularly if it is seen as part of internationalisation. In other words, Global Education serves to enhance the capacity of TAMK to deliver excellent graduates to a globalised working environment, by virtue of the development of processes and capacities that ensure quality delivery. Global Education can be the vanguard of further improvement of internationalisation throughout the institution. The current “numbers thinking” in terms of internationalisation, as evidenced by the reporting on the number of student mobility, as a marker for internationalisation is government-driven and practiced in many countries. This is something that has to change. TAMK can be ahead of the curve by focusing on learning outcomes in internationalisation and developing more depth to this across the whole institution.

7.2 Participation in quality work

The legislation surrounding the use of funds prohibits public funds being expended on Global Education. This has reduced the extent of personnel involved in the quality procedures associated with it. Nevertheless, staff involved in these operations, as well as the students, are all involved in quality work, just like what happens throughout the rest of TAMK. In addition to the “normal” stakeholders in education, GE has at times additional stakeholders, namely the client organisation or partner organisation(s). This client–service provider relationship and its further development is one example of how GE can be at the forefront for the whole of TAMK. After all, such development sensitises an organisation to consider the needs of all stakeholders and how to bring them together in productive relationships.

It was clear from interviews that the client organisation was very much involved in quality work, whilst partners in delivery used their own quality systems for their part(s) in the operation. The actual workload generated by the optional audit target was borne by the staff and stakeholders involved in this process. The level of satisfaction communicated about this indicated that this was not an excessive load, but one that would normally be expected in a client–service provider relationship.

The quality system as a whole

TAMK's quality system is the result of an intensive and participatory development process aimed at developing one new system for two merged institutions, which combines strategic, operational and quality management. The system, the basis of which is the annual performance planning process (TASO), constitutes a functioning system for all core duties of the institution, yet with a need for refinement and streamlining as far as feedback systems, data production and RDI evaluation are concerned. Measures taken as results of evaluations and feedback give evidence that the quality system has an impact on the further development of operations and core duties. The system is embedded in a diligently developed culture demonstrated by a strong commitment to the continuous improvement of the quality system.

*The quality system as a whole is at a **developing** stage.*

8.1 Comprehensiveness and impact of the quality system

TAMK's quality system is the result of an intensive process that started after the merger of Pirkanmaa UAS and Tampere UAS, which had to bring to grips two systems and two "cultures". TAMK has succeeded in developing and implementing a quality system that embraces the differences brought along by the merged institutions and the new institutional context, but also fit for the purpose of steering the process of continuous evaluation and improvement. As an integrated part of the management system, the quality system supports the implantation of TAMK's strategy and objectives in all core areas, and covers all operations with regards to its core duties, with the TASO process as the underpinning driver. Even though the period following the merger and implementation period of the new system was seen as quite challenging (as was confirmed in the interviews), TAMK can benefit from the new system and the overall awareness of quality culture, which was created during the inclusive development process, for continuous improvement and quality enhancement.

The quality management procedures embedded in the TASO Process (see Figure 2 in section 3) constitute a functioning system with the PDSA cycle serving as the overall framework. TAMK's quality system and the TASO process support the institution's strategic and operational objectives

through forecast data and an institutional action plan, the setting of strategic and operational indicators for all core duties, budgeting and the performance agreement with the Ministry of Education and Culture, the designing and refining of the programme curricula, and the setting of action and economic plans for all core duties and units (**PLAN**). Apart from setting the objectives, the performance planning process also defines measures to achieve them as well as follow-up and evaluation of the attainment of the set objectives. The strategic objectives focus on internationalisation of all core duties (education, RDI), on future competencies to enhance students' development through high-quality degree programmes suited to the labour market, as well as on customer relations and partnerships to foster TAMK's impact on innovation and the development of the Tampere region.

TAMK's quality system is well in line with the structure of the institution, with a clear distribution of responsibilities and duties, as well as a transparent description of all processes and guidelines in the quality manual *Compass* (**DO**). The Management Year Clock (see also section 6) helps staff members to follow their tasks and duties throughout the year. TAMK makes a strong effort to enhance RDI activities in general and to integrate these into degree education, yet it does not always succeed in raising awareness among students of these activities. Internationalisation is also at the forefront of degree education, yet the understanding of in how far *Global Education* and *internationalisation* share common grounds still needs refinement. The interviews also showed that deviations from processes do exist, which could easily be avoided by a stricter monitoring of certain processes (e.g. course descriptions and feedback on students' feedback).

TAMK has developed a sound culture of sharing good practices to make quality work part of everyone's daily work. Students and their needs are at the focus of TAMK's key activities, working groups complement the institutional structure, the needs of staff members are catered for in the annual resource planning, and labour market input and the input from regional partners are gathered through target-specific groups such as Advisory Boards. Students are represented in all relevant working groups and thus have a strong voice in the development processes.

TAMK's quality system is based on a performance approach and thus includes a set of strategic and operational indicators that support the evaluation process. Regular reviews of results and indicators, self-evaluation of degree programmes and evaluations of RDI projects, managerial meetings and development discussions as well as internal audits are used to **check** (**STUDY**) the progress towards the achievement of the set goals. TAMK has put into place a large feedback system for students, staff and stakeholders, ranging from course evaluations to report information, from spontaneous feedback to benchmarking activities. Undoubtedly, the amount of information generated is impressive; however, not all the information can be used adequately, as too much information may block the view of the essential, which was also mentioned in the interviews. The same holds good for students' feedback – a sometimes too-individual approach may decrease the effectiveness of the system. Simplifying and streamlining the feedback system and the data generated are fields of development; the same holds true for the periodicity of course evaluations as well as a more structured reporting back to students as to actions derived from their feedback. A less dense evaluation cycle – eventually systematically spread over the life cycle of a programme – might even enhance students' motivation to participate and give the institution sufficient time to “celebrate” the effects of corrective actions.

TAMK strongly builds on customer relations and partnerships and thus highly values the input from working life partners, internship employers as well as regional R&D cooperation partners. The audit team encourages the institution to continue in this direction, and also to include the view of alumni more systematically.

Internal audits take place at regular intervals and are used to further develop processes and procedures. In the interviews, members of all groups confirmed that the preparation of this (FINEEC) audit was experienced as a positively intensive process of critical reflection and quality discussions. Corrective actions resulting from feedback, evaluations, (non-)attainment of goals, performance discussions, etc. become effective in staff development, curriculum development and operations development (**ACT**).

Evidence of the effectiveness of the quality system is among others provided through the comprehensive process of curriculum revision, the proactive approach and growth in RDI, the use of student feedback for the development of courses, and staff development based on annual development discussions.

8.2 Quality culture

The institution's approach to quality culture is openness and participation stemming from the development process after the merger of Tampere UAS and Pirkanmaa UAS. Openness meaning that feedbacks on and discussions of quality issues as well as sharing and appreciating good practices form part of TAMK's daily operational work, participation meaning that internal as well as external stakeholders are regularly integrated in quality processes either through surveys, feedbacks or in working groups. The introduction of the TASO Process and the *Compass* quality manual have positively affected TAMK's quality culture as they created a common understanding of quality work. Even though it may not always be easy to adhere to quality principles in daily operational work as it was mentioned in some interviews, the audit team appreciates the high commitment, engagement and obvious participation of students, staff and external stakeholders to quality and in quality work – a fact that became evident during the site visit. The audit team also encourages the institution to further continue its endeavours in this respect.

8.3 The quality system as a whole

As was described in the previous sections, TAMK could give evidence of a well-functioning and unified system of quality management procedures that support strategic and operational objectives as well as all aspects of its core duties' operations. The TASO process as the backbone of the institution's annual management cycle comprises all organisational levels and units thus serving as an integrated quality assurance and management cycle. As was confirmed in the interviews, the TASO process is accepted and appreciated across all units of TAMK. Furthermore, the system makes good use of a subtle range of performance indicators and evaluation processes and supports the further development of operations. A particularly notable feature of the system is the strong involvement of external stakeholders, such as Advisory Board members and regional partners in

the institution's quality work. The optional audit target- *global education* - forms an essential aspect of the strategic work of the institution although it still needs further refinement and alignment to internationalisation activities in general. The functional objectives set for the quality system (see chapter 3) are attained, evidence for the effectiveness of the system were provided.

9.1 Strengths and good practices of the quality system

Strengths

- The TASO Process and the performance agreement process are the outcomes of a diligently manoeuvred endeavour to bring to grips two cultures and two systems after the merger of Pirkanmaa and Tampere UAS with now being the backbones of the quality system as well as overarching drivers for the further development work, as thus constituting an evident strength of TAMK.
- The quality manual Compass as well as the architecture of TAMK's intranet as quality portal considering all internal stakeholders are decisive elements for the functioning of the system.
- The high commitment of all TAMK staff to continuous quality work constitutes an essential and laudable feature of TAMK's quality culture.
- TAMK's strategic establishment of Advisory Boards fosters the institution's strong connection to working life, thus deploying a beneficial effect on curriculum development and curriculum redesign as well as quality work in degree education in general.
- Students' participation is incremental in TAMK's quality work: students are represented in all relevant working groups thus having a strong voice in the development process. Openness and transparency underpin the cooperation between students and staff.
- TAMK manages the quality of RDI activities in a systematic and effective way and thus triggers the development of the RDI quality management. RDI efforts are directed in a strategic manner and underpin the RDI quality management.
- During the merger process, TAMK has developed a diligent approach to creating a common understanding of quality culture embedded in an atmosphere of openness and participation. Sharing good practices to make quality work "tangible" for everyone is one of the key elements of TAMK's quality culture.
- TAMK's quality principle of openness and transparency is well demonstrated both by the comprehensive documentation of the institution's quality management and the easy accessibility of it.

- Co-operation with regional actors is actively sought for RDI projects, projects with societal impact and degree education relevant projects.
- As result of the annual evaluation and hence performance planning process, the needs of staff development are systematically met by extensive trainings tailored to the needs of individual staff members.

Good practices

- TAMK has well succeeded in implementing Advisory Boards that are systematically included in the institutional quality work, especially in the field of curriculum design, curriculum evaluation and re-design; furthermore, these boards function as bridgeheads to RDI work and regional impact projects and can well be considered an example of good practice.
- At TAMK, the students' voice in quality work is incremental, hence they are strongly involved in quality procedures and processes. This "student-centeredness" in terms of paying attention to students' needs and integrating them into all relevant processes is an example of good practice.
- The outcome of the institutional project "*Not bad*" focusing on the improvement of key support services and their functionality was the implementation of a so-called "Service Street" which assembles all student and some staff services in an easily accessible and user-friendly way. This highly valued *Service Street* is an example of good practice.
- TAMK has installed so-called Relationship Manager in order to increase the capacity to outreach to working life and help teachers to increase the number of collaboration projects where students can improve their professional competences and acquire practical and RDI experience, namely during the phase of their thesis composition. These managers are strategically placed in organisations and working groups inside and outside the UAS and thus ensure the information flow with the regional working life.
- The implementation of an evaluation rubric for group-work used by the Masters Degree programme of Management of Health Care and Social Services is an example of good practice to be followed by other programmes as well.
- TAMK's constant strive to improve and systematise its cooperation with external stakeholders was complemented by the introduction of Oiva, a new customer relationship management system that was more than once mentioned in the interviews as an excellent quality work tool. The audit team considers Oiva as another example of good practice.

9.2 Recommendations

- TAMK has built an extensive and comprehensive quality system that produces a lot of information. Indeed, the amount of data provided by the system appears to exceed the processing and utilisation capacity of the institution. The audit team recommends that TAMK selects the most important and useful data generating tools and questionnaires and omits those that do not serve its direct needs: It should always be absolutely clear for what purpose data is produced, how data will be utilised and whether the data produced is fit for the purpose. The UAS should also remember that many forms of quality data do not need to be gathered every year, but a longer cycle could increase the importance and usefulness of e.g. feedback.

- The interviewees provided the audit team with numerous and varying interpretations of the roles of and connections between internationalisation and global education activities at TAMK. There appeared even to be some lack of shared understanding of the very vision of TAMK. The audit team recommends that TAMK refines its understanding of internationalisation and global education activities and defines their status in the quality system more clearly.
- The audit team recommends that TAMK's quality system is developed to pay more attention to students' engagement in the RDI activities.
- The audit team recommends that TAMK tracks and integrates the alumni, including those graduates that are employed abroad, more systematically into the quality system of TAMK's education activities.
- The audit team recommends that a more refined understanding of the learning outcomes definition process is built into TAMK's quality system to ensure that the desired graduate profile is achieved. Moreover, learning outcomes should be explicitly stated in the implementation plans for all courses.
- The audit team recommends that the UAS develops a stricter quality management procedure to ensure that there is a well-functioning practical training placement network for all students, including international students. This is of utmost importance for assuring the consistency of the quality of the education at TAMK.
- The audit team recommends that a more systematic quality procedure is developed to ensure that the teachers close the feedback loop by reporting back to students on the improvements made on the basis of the gathered and utilised feedback data.

9.3 The audit team's overall assessment

The quality system of Tampere University of Applied Sciences fulfils the FINEEC criteria for the quality system as a whole and for the quality management as it relates to core duties. None of the audit targets are at the level of absent, and the quality system as a whole (audit target 6) is at the developing level.

The audit team proposes to FINEEC Higher Education Evaluation Committee that Tampere University of Applied Sciences passes the audit.

9.4 Higher Education Evaluation Committee's decision

In its meeting on 14 March 2016, the Higher Education Evaluation Committee decided, based on the proposal and report of the audit team, that the quality system of the Tampere University of Applied Sciences meets the FINEEC criteria for quality systems as a whole and quality management of the higher education institution's core duties. Tampere University of Applied Sciences has been awarded a quality label that is valid for six years beginning on 14 March 2016.

APPENDIX 1: Table of the audit targets and criteria

TARGETS	CRITERIA			
	Absent	Emerging	Developing	Advanced
1. Quality policy	<p>The quality policy shows an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> • rationale and definition of the quality system's objectives and responsibilities • accessibility of the quality policy to internal and external stakeholders • linking to the institution's overall strategy. 	<ul style="list-style-type: none"> • The quality policy's rationale, objectives and division of responsibilities are at an early stage of development and are only partially defined. • The quality policy is not fully accessible and does not sufficiently take into account the information needs of internal and external stakeholders. • The quality policy is insufficiently linked to the institution's overall strategy. 	<ul style="list-style-type: none"> • The quality policy's rationale, objectives and division of responsibilities are clearly defined and the result of an inclusive process. • The quality policy is accessible to all internal and external stakeholders, taking their information needs into account. • The quality policy is clearly linked to the institution's overall strategy. 	<ul style="list-style-type: none"> • The quality policy's rationale, objectives and division of responsibilities are defined in explicit terms and the result of a thorough and wide process. • The quality policy is accessible and actively communicated to all internal and external stakeholders. • The quality policy is an integral part of the institution's overall strategy.

TARGETS

CRITERIA

TARGETS	CRITERIA		
	Absent	Emerging	Advanced
2. Quality system's link with strategic management	<p>The quality system and quality work show an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> • ability to meet the information needs of strategic and operations management • procedures for the use and communication of quality information • functionality at different organisational levels • division of responsibility • commitment in the execution of roles and responsibilities in the institution's quality work. 	<ul style="list-style-type: none"> • The quality system and the information it produces serve only partially the needs of strategic and operations management. • Procedures for the use of and communication of quality information are weak or uneven. • The quality system functions unevenly across the institution. • The division of responsibility is only partially effective, with variable commitment in the execution of roles and responsibilities in the institution's quality work. 	<ul style="list-style-type: none"> • The quality system and the information it produces serve strategic and operations management. • Established procedures ensure that the information produced is put to use and communicated systematically within the institution and to external stakeholders. • The system works evenly across different organisational levels and units. • The division of responsibility is effective, and roles and responsibilities in the institution's quality work are executed with commitment. • The institution has well-established and excellent procedures that systematically produce information for strategic needs, and the information is put to systematic and wide use. • The institution has well-established and excellent procedures for communicating information to different personnel groups, students and external stakeholders. Communication of the information is active and up-to-date. • The quality system works effectively across all organisational levels, in a way that adds value to and enhances the quality of the institution's operations. • Managers and members of the community are committed to enhancement and the embedding of a quality culture.

TARGETS	CRITERIA			
	Absent	Emerging	Developing	Advanced
3. Development of the quality system	<p>The HEI shows an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> procedures for evaluating or developing the quality system or overall view of the functioning of the quality system. 	<ul style="list-style-type: none"> The institution has in place procedures for evaluating and developing the quality system but these procedures may not always be fit for purpose and/or effectively used for the system's further development. Institutional oversight of the functioning of the quality system needs to be strengthened. 	<ul style="list-style-type: none"> The HEI has in place well-functioning procedures to evaluate and develop the quality system. The institution is able to identify the system's strengths and areas in need of development, and development work is systematic. 	<ul style="list-style-type: none"> The HEI has well-established and systematic procedures for regularly evaluating and developing the system. The institution is able to efficiently identify the system's strengths and areas in need of development. There is clear evidence of the system's successful development work.
<i>Follow-up section for the HEIs subject to the second audit:</i>	<p>The HEI shows an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> development work following the first audit. 	<ul style="list-style-type: none"> The development of the quality system after the first audit has not been systematic or effective. 	<ul style="list-style-type: none"> The development of the quality system after the first audit has been systematic. The system works better than before. 	<ul style="list-style-type: none"> After the first audit, the HEI has systematically improved the functionality and fitness for purpose of the quality system. Special attention has been given to the workload produced by the system. The system has been developed in a successful and effective manner.

The fulfilment of the following criteria is reviewed separately for each core duty and optional audit target:

TARGETS

CRITERIA

	CRITERIA		
	Absent	Emerging	Developing
<p>4. Quality management of the core duties, including essential services supporting these</p> <p>4a) Degree education</p> <p>4b) Research, development and innovation activities, as well as artistic activities</p> <p>4c) Societal impact and regional development work (incl. social responsibility, continuing education, open university and open university of applied sciences education, as well as paid-services education)</p> <p>4d) Optional audit target</p>	<p>The quality system shows an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> • quality management procedures used to achieve the goals set for the core duties • participation of the institution's personnel groups, students or external stakeholders in quality work related to the core duties • quality management of essential services supporting the core duties. 	<ul style="list-style-type: none"> • The quality management procedures are in place but insufficiently developed. The procedures do not fully support the achievement of institutional strategic goals set for the core duties. • The information provided by the quality system is as yet insufficient for the development of the core duties. Information use is sporadic and/or information collection is an end in itself. • Personnel groups, students and external stakeholders are only partially involved in quality work. • The quality management of key support services is not functional. 	<ul style="list-style-type: none"> • Functional quality management procedures advance the development of the institution's core duties and the achievement of goals set for the operations. • The quality system produces relevant information for the development of the core duties, and the information is used for this purpose. • Personnel groups and students are involved in quality work. External stakeholders also participate. • The quality management of key support services functions relatively well.
			<p>Advanced</p> <ul style="list-style-type: none"> • The HEI has systematic and well-established quality management procedures that provide excellent support for the development of the institution's core duties and the implementation of its overall strategy. • The institution has systematic and excellent procedures used to produce information for the development of the core duties. There is clear evidence that information is used systematically and successfully. • Personnel groups and students are committed and actively involved in quality work. Special attention has been given to the workload generated by the quality management procedures. External stakeholders are also systematically involved in quality work. • The HEI has systematic and well-established procedures for the quality management of key support services. There is clear evidence that these procedures function well.

The fulfilment of the following criteria is reviewed separately for each degree programme:

TARGETS	CRITERIA			
	Absent	Emerging	Developing	Advanced
5. Samples of degree education: degree programmes Planning of the programme <ul style="list-style-type: none"> • Curricula and their preparation • Intended learning outcomes and their definition • Links between research, development and innovation activities, as well as artistic activities, and education • Lifelong learning • Relevance of degrees to working life. Implementation of the programme <ul style="list-style-type: none"> • Teaching methods and learning environments • Methods used to assess learning • Students' learning and well-being • Teachers' competence and occupational well-being. Participation <ul style="list-style-type: none"> • Participation of different personnel groups, students and external stakeholders in quality work related to the degree programme. Effectiveness of quality work <ul style="list-style-type: none"> • Suitability of key evaluation methods and follow-up indicators and their impact on the achievement of goals. 	<p>The quality system shows an absence of or major shortcomings in the:</p> <ul style="list-style-type: none"> • quality management procedures related to the planning of the programme • quality management procedures related to the implementation of the programme • participation of the institution's personnel groups, students or external stakeholders in the development of the programme or • effectiveness of the quality work related to the programme. 	<ul style="list-style-type: none"> • The quality management procedures related to the planning of educational provision are not fully functional and do not provide sufficient support to the planning of the programme. • The quality management procedures related to the implementation of educational provision are not fully functional and do not provide sufficient support to the implementation of the programme. • Personnel groups, students and external stakeholders only partially participate in quality work. • There is little evidence of the effectiveness of the quality work related to the programme. 	<ul style="list-style-type: none"> • The quality management procedures related to the planning of educational provision are fully functional and support the planning of the programme. • The quality management procedures related to the implementation of fully functional and support the implementation of the programme. • Personnel groups and students participate in quality work. External stakeholders also participate. • There is evidence that quality work has an enhancement effect on the programme. 	<ul style="list-style-type: none"> • The quality management procedures related to the planning of educational provision provide excellent support for the planning of the programme. They are systematic and well-established. • The quality management procedures related to the implementation of educational provision provide excellent support for the implementation of the programme. They are systematic and well-established. • Personnel groups and students participate actively and with commitment in quality work. External stakeholders are also systematically involved. • There is clear evidence of the enhancement effect of the quality work.

TARGETS

CRITERIA

TARGETS	CRITERIA			
	Absent	Emerging	Developing	Advanced
6. The quality system as a whole	<ul style="list-style-type: none"> • The HEI has only individual and unrelated quality management procedures. • There is no evidence of the procedures' impact on the development of the operations. 	<ul style="list-style-type: none"> • The quality management procedures do not yet form a functioning and unified system. • The quality system encompasses some of the HEI's core duties but there is little evidence of the system's impact on the development of the core duties. • The institution's quality culture is only just emerging. 	<ul style="list-style-type: none"> • The quality management procedures constitute a functioning system. • The quality system covers the essential parts of the core duties of the HEI and provides support for the development of the operations. There is evidence that the system has an impact on the development of the core duties. • The development of the operations is based on an existing quality culture. 	<ul style="list-style-type: none"> • The quality management procedures form a dynamic and coherent system. • The quality system covers all the core duties of the HEI and provides excellent support for the institution's overall strategy and the development of the operations. There is clear evidence that the system has an impact on the development of the core duties. • The institution has a well-established quality culture, characterised by wide participation, commitment and transparency.

APPENDIX 2: The stages and timetable of the audit process

Agreement negotiation between Tampere University of Applied Sciences and FINEEC	14 January 2015
Appointment of the audit team	11 May 2015
The audit materials and self-evaluation report submitted to FINEEC	17 August 2015
Information and discussion event at Tampere University of Applied Sciences	5 October 2015
Audit visit	10-12 November 2015
Decision on the results of the audit	14 March 2016
Concluding seminar	21 April 2016
Follow-up seminar	2019

APPENDIX 3: Programme of the audit visit

Tuesday 10 th November 2015	
09.00—10.00	Interview with the Executive Board
10.10—10.50	Interview with the Board of Tampere University of Applied Sciences Ltd
11.00—11.50	Interview with directors of education
12.00—13.00	Lunch
13.00—13.50	Interview with teaching staff
14.00—14.50	Interview with students
15.00—15.50	Thematic interview on Global Education in TAMK
16.00—16.50	Interview with external stakeholders
Wednesday 11 th November 2015	
09.00—09.50	Thematic interview on Quality Management of RDI
10.00—10.50	Interview with staff of the Degree programme in Business Administration
11.00—11.50	Interview with students of the Degree programme in Business Administration
12.00—13.00	Lunch
13.00—13.50	Interview with staff of the Degree programme in Energy and Environmental Engineering
14.00—14.50	Interview with students of the Degree programme in Energy and Environmental Engineering
15.00—15.50	Interview with staff of the Master's programme in Management of Health Care and Social Services
16.00—16.50	Interview with students of the Master's programme in Management of Health Care and Social Services
Thursday 12 th November 2015	
10.00—10.50	Thematic interview on Quality Management of Education
11.00—11.50	Interview with the Support services
12.00—13.00	Lunch
13.00—14.30	Audit team meeting
14.30—15.30	Interview and preliminary feedback to the Executive Board

The Finnish Education Evaluation Centre (FINEEC) is an independent, national evaluation agency responsible for the external evaluations of education from early childhood education to higher education in Finland. It implements system and thematic evaluations, learning outcome evaluations and field-specific evaluations. Moreover, FINEEC supports providers of education and training and higher education institutions in matters related to evaluation and quality assurance, as well as advances the evaluation of education.

Audits of the quality systems of higher education institutions have been implemented in Finland in accordance with the principle of enhancement-led evaluation since 2005. The objective of the audits has been to support Finnish institutions in developing quality systems that correspond to the European principles of quality assurance and to demonstrate that functional and consistent quality assurance procedures are in place in Finland both in institutions and on the national level. In the audits, institutions are supported in their efforts to reach their strategic objectives and in directing future development activities in order to create a framework for the institutions' continuous development.

This report presents the audit process of Tampere University of Applied Sciences and the results of the audit.

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