FINNISH EDUCATION
EVALUATION CENTRE

AUDIT OF THE UNIVERSITY OF HELSINKI 2015

Peter Riedler
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Abstract

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Abstract

The Finnish Education Evaluation Centre has conducted an audit of the University of Helsinki and awarded the University with a quality label that will be valid for six years from 27 February 2015. The quality system of the University of Helsinki fulfils the national criteria set for the quality management of 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 the University of Helsinki has developed based on its own needs and goals. The freely selected audit target chosen by the University was the staff recruitment for an international university. The following elements were regarded as key strengths of the quality system:

1. At the University of Helsinki there is high commitment to excellence and quality. The commitment towards excellence and the positive disposition of the staff to further improve degree education, research and societal impact provide evidence in their own right of the existence of a well-developed quality culture.

2. The strategic plan defines the objectives of the quality policy and the quality system is adapted to the University's management system. The data produced from the management information system meets the needs of the University's leadership. Information production and the various follow-up operations also enable the responsible unit leaders to adapt their operational approach.

3. The establishment of Flamma (the intranet system), is a major achievement of quality management for the University. It appears to have been a catalyst for change in the quality management and perhaps a turning point with some future potential for the harmonisation of quality procedures in the University in terms of clarity and visibility of operational procedures. It also provides a way to share and embed good practices within the University community.

Among others, the following recommendations were given to the University of Helsinki:

1. Building upon the quality components in place at present, the University of Helsinki would benefit from developing an overall blueprint for the architecture of the quality system. This should incorporate formalisation of the effective practices that currently support, develop and monitor quality in the University. The University could also consider and review how all of the quality management procedures link to each other to form a system that is more visible and identifiable.

2. It is recommended that the University track and record the impact of its quality work more visibly and focus more attention on demonstrating the benefits of the quality system. The University could provide enhanced analysis of the management information system outcomes and consider how this will inform the quality mandate. In addition, the University would benefit from considering how the plan for the formal development of the various databases will specifically support and guide the development of the quality system.

3. The audit team suggests that the University develops a leadership initiative to support and promote an exchange of sharing effective practices of the quality management procedures for degree education, research and societal interaction, and establish appropriate forums to capture this.

Key words
Evaluation, audit, quality system, quality management, quality, higher education institutions, university

Tiivistelmä

Julkaisija
Kansallinen koulutuksen arviointikeskus

Julkaisun nimi
Helsingin yliopiston auditointi 2015

Tekijät
Peter Riedler, Martin Galevski, Seija Koppinen, Karena Maguire, Seija Mahlamäki-Kultanen, Sijbolt Noorda, Hannele Seppälä and Marja-Liisa Saarilammi

Tiivistelmä

Kansallinen koulutuksen arviointikeskus on toteuttanut Helsingin yliopiston auditoinnin ja antanut yliopistolle laatuleiman, joka on voimassa kuusi vuotta 27.2.2015 alkaen. Helsingin yliopiston laatujärjestelmä täyttää korkeakoulujen laadunhallinnalle asetetut kansalliset kriteerit ja vastaa eurooppalaisia korkeakoulujen laadunhallinnan periaatteita ja suosituksia.

Auditoinnin kohteena oli Helsingin yliopiston laatujärjestelmä, jonka yliopisto on kehittänyt omista lähtökohdistaan ja tavoitteidensa mukaisesti. Yliopiston valitsema vapaavalintainen auditointikohde oli kansainvälisen ylipiston rekrytoinnin laadunhallinta. Laatujärjestelmän keskeisinä vahvuuksina pidetään:

1. Helsingin yliopiston sitoutuneisuus korkeatasoisiin tavoitteisiin ja henkilöstön innostuneisuus opetuksen, tutkimuksen sekä yhteiskunnallisen vuorovaikutuksen kehittämiseen ovat osoituksia kehittyneestä laatukulttuurista yliopistossa.

2. Yliopiston strategia määrittelee laatupolitiikan tavoitteet ja laatujärjestelmä on osa yliopiston johtamisjärjestelmää. Tietojärjestelmien tuottama tieto palvelee yliopiston johtamista. Tiedon tuotanto ja toiminnan seurantamekanismit tukevat toiminnan johtamista myös yksikkötasolla.

3. Yliopiston uuden intranetjärjestelmän, Flamman, luominen on merkittävä askel yliopiston laadunhallinnan kehittämisessä. Se on toiminut yliopiston laadunhallinnassa muutoksen käynnistäjänä ja käännekohtana. Tulevaisuudessa Flamma voi tarjota

mahdollisuuksia yliopiston laadunhallinnan menettelytapojen yhtenäistämisessä ja selkeyttämisessä sekä laatutyön näkyvyyden lisäämisessä. Flamma mahdollistaa myös hyvien käytäntöjen jakamisen yliopistoyhteisössä.

Helsingin yliopistolle esitetään muun muassa seuraavia kehittämissuosituksia:

1. Auditointiryhmä suosittelee, että yliopisto laatii kokonaissuunnitelman laatujärjestelmän rakenteesta. Samalla tulisi vakiinnuttaa toimivat käytännöt, joiden avulla tuetaan, kehitetään ja seurataan laatua yliopistossa. Yliopiston tulisi myös tarkastella, miten kaikki laadunhallinnan menettelytavat yhdistyvät toisiinsa muodostaen näkyvän ja tunnistettavan järjestelmän.

2. Auditointiryhmä suosittelee, että yliopisto seuraa ja dokumentoi näkyvämmin laatutyön vaikutuksia ja kiinnittää enemmän huomiota laatujärjestelmän hyötyjen näkyväksi tekemiseen. Yliopisto voisi tuottaa analyysejä tietojärjestelmän tuloksista ja arvioida miten järjestelmät palvelevat laadunhallinnan tavoitteita. Lisäksi yliopisto voisi arvioida, miten tietojärjestelmien kehittämissuunnitelma tukee ja ohjaa laatujärjestelmän kehittämistä.

3. Auditointiryhmä suosittelee, että yliopiston johto käynnistää hankkeen tutkintotavoitteisen koulutuksen, tutkimuksen ja yhteiskunnallisen vuorovaikutuksen laadunhallintaan liittyvien hyvien käytäntöjen jakamiseksi sekä perustaa tätä tarkoitusta palvelevat foorumit.

Avainsanat
Arviointi, auditointi, laatujärjestelmä, laadunhallinta, laatu, korkeakoulut, yliopisto

SAMMANDRAG

Utgivare
Nationella centret för utbildningsutvärdering

Publikation
Auditering av Helsingfors universitet 2015

Författare
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Sammandrag

Nationella centret för utbildningsutvärdering har utfört en auditering av Helsingfors universitets kvalitetssystem och beviljat universitetet en kvalitetsstämpel som är i kraft sex år från och med den 27 februari 2015. Helsingfors universitets kvalitetssystem uppfyller de nationella kriterier som fastställts för högskolornas kvalitetshantering och systemet motsvarar de europeiska principerna för och rekommendationerna om högskolornas kvalitetshantering.

Föremålet för auditering var Helsingfors universitets kvalitetssystem, som universitet tagit fram utifrån egna utgångspunkter och mål. Auditeringsobjektet, som universitetet kunde välja fritt, var personalrekryteringen i ett internationellt universitet. Kvalitetssystemets viktigaste styrkor är följande:

1. Vid Helsingfors universitet är engagemanget stort för spetskompetens och kvalitet. Engagemanget för spetskompetens och personalens positiva inställning till ytterligare förbättring av den examensinriktade utbildningen, forskningen och genomslagskraften i samhället visar att det finns en välutvecklad kvalitetskultur i universitetet.

2. I universitetets strategi fastställs kvalitetspolitikens mål och kvalitetssystemet utgör en del av universitets ledningssystem. Den information som ledningens informationssystem producerar tillgodoser behoven hos universitetsledningen. Produktionen av information och de olika förfarandena för uppföljning av verksamheten ger också de ansvariga enhetscheferna möjlighet att anpassa sin operativa verksamhet efter ny information.

3. Skapandet av universitetets nya intranät, Flamma, är en av de viktigaste prestationerna som kvalitetshanteringen har åstadkommit för universitet. Intranätet verkar ha fungerat som en förändringskatalysator och en vändpunkt i fråga om kvalitetshanteringen. Flamma har framtida potential att leda till harmonisering av universitetets kvalitetshanteringsförfaranden genom att öka de operativa förfarandenas tydlighet och synlighet. Dessutom ger Flamma möjlighet att dela och förankra god praxis i universitetssamfundet.

Helsingfors universitet ges bland annat följande rekommendationer för vidareutveckling:

1. Helsingfors universitet skulle ha nytta av att ta fram en övergripande plan för kvalitetssystemets hela struktur som bygger på de existerande kvalitetshanteringskomponenterna. Detta borde omfatta en formalisering av de effektiva förfaranden som universitet redan har för att stödja, utveckla och följa upp kvaliteten. Universitetet skulle också kunna överväga och granska hur alla kvalitetshanteringsförfaranden är kopplade till varandra, så att de bildar ett system som är synligare och mer identifierbart.

2. Auditeringsgruppen rekommenderar att universitetet följer och dokumenterar kvalitetsarbetets verkningsfullhet mer synligt samt lägger mera vikt vid att visa nyttan med kvalitetssystemet. Universitetet kunde göra en noggrannare analys av informationen som ledningens informationssystem producerar och reflektera över hur informationen betjänar kvalitetsarbetet. Dessutom kunde universitetet ha nytta av att reflektera över hur planen för att utveckla de olika databaserna specifikt stödjer utvecklingen av kvalitetssystemet.

3. Auditeringsgruppen föreslår att universitetet skapar initiativ för ledningen med syfte att stödja och främja utbytet av effektiva kvalitetshanteringsförfaranden för den examensinriktade utbildningen, forskningen och genomslagskraften i samhället samt skapar lämpliga forum för detta.

Nyckelord
Utvärdering, auditering, kvalitetssystem, kvalitetshantering, kvalitet, högskolor, universitet

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1 Description of the audit process

1.1 Audit targets

The target of the audit is the quality system that the University of Helsinki has developed on the basis of its own needs and goals. The focus of the audit is on 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 higher education institution's (HEI) objectives and the content of its activities or results are not evaluated in the audit. The aim is to help the HEI to identify strengths, good practices and areas in need of development in its operations.

The Finnish Education Evaluation Centre's (FINEEC) audits evaluate whether the institution's quality system meets national criteria (Appendix 1) and whether it corresponds to the Standards and Guidelines for Quality Assurance in the European Higher Education Area (also known as ESG). In addition, the audit evaluates how well the quality system meets strategic and operations management needs, as well as the quality management of the HEI's basic duties and the extent to which it is comprehensive and effective. In this way the audit focuses 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.

The University of Helsinki chose "Staff recruitment for an international university" as its optional audit target. As an exception to the FINEEC's standard audit procedure, the audit of the University of Helsinki included four samples of degree education programmes. The samples of degree education programmes selected by the University of Helsinki were *Bachelor's and Master's degree education programmes in Computer Science, Bachelor and Licentiate degrees in Veterinary Medicine and Licentiate and Doctor of Philosophy degrees at the Faculty of Arts*. The audit team chose the *Bachelor's and Master's degrees in Economics at the Faculty of Social Sciences* as the fourth sample of degree education.

The audit targets for the University of Helsinki:

1. The quality policy of the higher education institution
2. Strategic and operations management
3. Development of the quality system
4. Quality management of the higher education institution's basic duties:
   a. Degree education
   b. Research, development and innovation activities (RDI), as well as artistic activities
   c. Societal impact and regional development work[1]
   d. Optional audit target: Staff recruitment for an international university
5. Samples of degree education:
6. Bachelor's and Master's degree education programmes in Computer Science
7. Bachelor and Licentiate degrees in Veterinary Medicine
8. Bachelor's and Master's degree education in Economics at the Faculty of Social Sciences
9. Licentiate and Doctor of Philosophy degrees at the Faculty of Arts
10. The quality system as a whole

1.2 Implementation of the audit

The audit is based on the basic material and self-evaluation report submitted by the University of Helsinki together with an audit visit to the University on 6-9 October 2014. The audit team also had access to electronic materials that were important for quality management. The main phases and time frame of the audit process are shown in Appendix 2.

An international audit team carried out the audit in English. The University of Helsinki was given the opportunity to comment on the team's composition especially regarding disqualification prior to the appointment of the audit team.

The audit team:

Chair
Peter Riedler, PhD, Vice-Rector for Financial Affairs, Resources and Location Development, University of Graz, Austria

Members
Martin Galevski, PhD Student, University of Oxford, United Kingdom
Seija Koppinen, Senior Specialist, VTT Technical Research Centre of Finland Ltd, Finland

[1] Including social responsibility, continuing education and open-university education, as well as paid-services education.

Karena Maguire, Head of Quality Assurance Services, Quality and Qualifications Ireland (QQI), Ireland
Seija Mahlamäki-Kultanen, Adjunct professor (Tampere University), Dean, Häme University of Applied Sciences, Finland
Sijbolt Noorda, PhD, President, Academic Cooperation Association ACA, Magna Carta Observatory, Netherlands

FINEEC staff members: Senior Advisor Hannele Seppälä acted as the project manager for the audit and as the secretary of the audit team, and Chief Planning Officer, Marja-Liisa Saarilammi, acted as another secretary and as a backup for the project manager.

As indicated, the audit team conducted a four-day audit visit to the University of Helsinki. The purpose of the visit was to verify and supplement the observations made of the quality system based on the audit material. The programme of the visit is shown in Appendix 3.

The audit team drew up this report based on the material accumulated during the evaluation and on the analysis of that material. The audit team members produced the report jointly by drawing on the expertise of each team member. The University of Helsinki was given the opportunity to check the report for factual information prior to the FINEEC's Higher Education Evaluation Committee's decision-making.

2
The organisation of the University of Helsinki

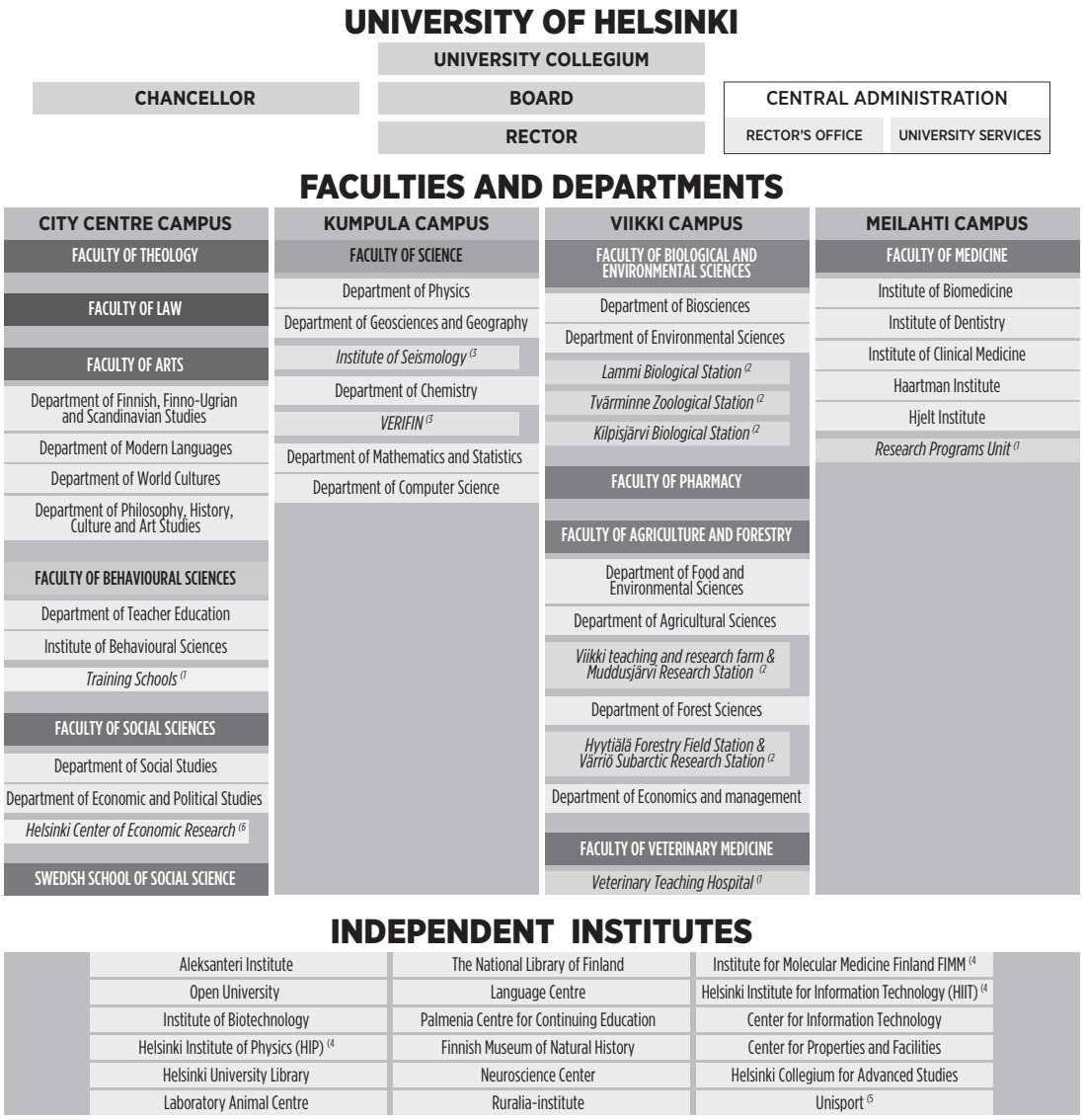
The University of Helsinki, founded in 1640, is a multidisciplinary research university with some 40,000 students and 4,500 researchers and teachers. It operates on four campuses in Helsinki and at 17 other locations.

The University of Helsinki has a three-level organisational structure. The University level includes the University Collegium, the Board, the Rector, the Chancellor and Central Administration. The second level consists of the faculties and independent institutes, whereas the third level comprises the departments and units under the faculties. Moreover, various networks and campus units operate at the University. The University's organisational chart clarifies this structure (Figure 1).

The number of faculties is 11, and the number of departments belonging to the faculties is 24. In addition, some special units, e.g., training schools, biological stations and the Veterinary Teaching Hospital, belong to the faculties.

Independent institutes can be categorised in three different ways: institutes for research (e.g., the Institute of Biotechnology), services (e.g., the Helsinki University Library) and teaching (e.g., the Language Centre). Some institutes have dual purposes, such as the Finnish Museum of Natural History (services and research) and the Palmenia Centre for Continuing Education (teaching, tailor-made research, and societal interaction).

The Central Administration of the University is divided into two main sectors, one for strategic management and administration (the Rector's Office) and another for university services. The Rector's Office handles the supervision and strategic functions of each sector. The Rector's Office assists the Rector in carrying out the University's duties profitably, economically and efficiently. The office assists the Vice-Rectors in handling and preparing matters related to their respective tasks. The office is responsible for preparing and implementing the Board's and the Rector's decisions.



(1 Budgetary units that operate under faculties but are not departments.

(2 Research stations and teaching and research farms.

(3 Units which carry out special national authority tasks: Institution of Seismology operates under the Department of Geosciences and Geography; VERIFIN (Finnish Institute for Verification of the Chemical Weapons Convention) operates under the Department of Chemistry.

(4 Joint research institutes: HIP is shared between University of Helsinki, University of Jyväskylä, Lappeenranta University of Technology, Tampere University of Technology and Aalto University. HIIT is shared between University of Helsinki and Aalto University. FIMM is shared between the University of Helsinki, the Hospital District of Helsinki and Uusimaa (HUS), the National Institute for Health and Welfare (THL) and the VTT Technical Research Centre of Finland.

(5 UniSport is shared between University of Helsinki and Aalto University.

(6 Helsinki Center of Economic Research (operates under the Department of Economic and Political Studies) is shared between Aalto University and Hanken School of Economics.

Figure 1. The organisation chart of the University of Helsinki.

The Director of Sector bears university-level responsibility for the practical instructions and development of his or her sector according to the University's strategic plan. The Director of Sector manages the Central Administration unit for which he or she is responsible.

Management and governance

The Board is the supreme decision-making body of the University. The Board is headed by a chair and has 13 members. The Rector manages the University's activities assisted by three Vice-Rectors. Central Administration, which is headed by the Director of Administration, supports the Rector and Vice-Rectors in their duties.

The Chancellor of the University of Helsinki is in charge of promoting the sciences and the University's social interaction, as well as supervising the interests and activities of the University.

Each faculty is led by a Dean, who is selected for a term of four years. Each Dean monitors the operations of the faculty and is responsible for general faculty operations, personnel administration and its implementation. Each faculty may appoint one or more persons to the position of Vice-Dean. Each department belonging to a faculty is led by a Head of Department, selected for a term of four years.

3 The quality policy of the higher education institution

The quality system and its constituent parts are well described at many levels by the University. The strategic plan defines the objectives of the quality policy and the quality system is adapted with the University's management system. The goal-setting process is inclusive. The quality system is embedded in the university structures and procedures, however, it is implicit in parts and would require more visibility. The data produced from the many elements of the management information system is clear. The information needs of most of the key internal and external stakeholders are taken into account in the information production and documentation. The key people involved and responsible for the operations are committed to their duties and have sufficient skills to undertake them as they are currently set out and in the existing context. In principle, the division of responsibility functions well. However, the connectivity between the different quality reference groups, committees and networks would need further clarification.

The quality system would benefit from a closer alignment with the future objectives of the University. The University would benefit from developing the quality system towards a more development-oriented approach to support and secure the next very important phase of development for the university.

The quality policy of the University of Helsinki is at **a developing stage.**

3.1 Objectives of the quality system

The Strategic Plan for the University of Helsinki 2013–2016 defines the objectives of the University's quality policy as follows:

- Quality work supports the University of Helsinki in achieving its vision of "Excellence for society".
- Every member of the academic community shall contribute to the common goal of achieving the University's objectives and shall be responsible for his or her performance and outcomes.
- The purpose of the University's quality system is to aid the academic community and its members in developing a framework for quality management.

The quality system of the University of Helsinki is specifically designed to be an intrinsic part of university operations and management organisational structure. The quality system not only contributes to the development of operations management but it is the actual development, description and implementation of all operations management.

The University defines the quality system as a framework of operations development which defines the organisation, responsibilities, procedures and resources of quality management. Operations development at the University is based on the PDCA cycle of continuous improvement. The main elements of the quality system of the University are described in Figure 2.

Figure 2. The quality system of the University of Helsinki.

The concept of the quality system sets the ground for the interpretation of quality management. The University has stated that quality management encompasses all operations and is a part of the University's normal routines. It is also stated that quality management means that operations are expedient and that their results comply with the set objectives. The set objectives are described in terms of all objectives and particularly the strategic objectives.

The audit process indicated that the core features of the University's quality management are:

- Core operational processes that exist at the unit level as part of the operational/ quality system relating to research, the teaching and learning environment, external community relations (society groups) and a number of administrative and support services.
- Quality procedures and processes that are set out and communicated as part of the operational manual infrastructure (Flamma)
- An annual review report which is produced and based on a description of activities from the reports of the faculties, departments and independent institutes. The main focus of the review is to examine the process of attaining the strategic objectives at the level of the University and its units and overall implementation of the strategic targets.

There is a lot of evidence that the University has a well-established quality system in place. Many examples of effective practice were experienced by the audit team throughout the visit during interviews with staff. The audit team was convinced after the audit visit that the strategic plan, its values and the global vision inform the requirements of the quality system.

It was also clear to the audit team that the importance of quality is well accepted and understood by the diverse range of staff met during the site visit, including the teaching and support staff, the university executive, professors, heads of units and faculty heads, the Vice-Rectors and Rector. However, the audit team observed during the audit visit that the university staff described the quality system mainly in the context of their own work. It was evident to the audit team, in exploring the framework for quality management, that even as teachers and researchers apply a variety of quality management tools in their work, they do not recognise and cannot describe a basic quality assurance framework at the university level. The system does not always translate as a visible quality management system as a whole. Therefore the audit team supports further development of a more visible "framework for quality management".

The University may also wish to ensure that the developing quality system is more visible to all internal and external stakeholders as a complete system. It may wish to reorient the central focus of the system more towards the student experience, the teaching and learning experience (including research) and the overall student environment and supports. At present, this is not the central organising feature to the quality system as recommended by the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)[2]. The audit team considers that the

[2] The revised version of the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" is subjected to approval by the Ministerial Conference in May 2015. http://issuu.com/revisionesg/docs/esg_revision_-_proposal

University is not getting best value for money from its quality system in terms of how it is currently defined (the lack of visibility) and how it is disseminated to the stakeholders. This also extends to defining how the effectiveness of the system could be enhanced, as well as efficient resource allocation and performance measurement for all those contributing to actual quality management. The lack of visibility of the framework for quality management makes it difficult for the University to pull together and spread all of the very effective practice which has been established and for which the audit team did find much evidence of. It is also difficult for the staff, in particular for the academic staff, to understand their role in the quality framework.

3.2 Division of responsibilities related to the quality system

The self-evaluation report of the University of Helsinki described the division of responsibility and description and organisation of the key roles in quality assurance, including the establishment and management of committees and individuals. However, the roles, responsibilities and connectivity between the different quality reference groups, committees and networks were not clearly articulated by the University. There was however much evidence presented to the audit team during the site visit that some of these reference groups were clearly working on the improvement of quality by resolving issues and identifying priorities such as the development of the formal "partnership model" for third party engagements.

The self-evaluation report proclaims the university leadership is responsible for the quality system and the overall quality of operations. Responsibilities for quality assurance are said to rest with a number of entities within the university community including the Board, the Rector and the Unit and Faculty Heads. According to the self-evaluation report the Board of the University is responsible for definitions of the quality policy and the Rector is responsible for the quality system as part of strategic management as well as for the overall quality of operations and results. Follow-up strategic indicators and consideration of the Ministry of Education and Culture targets are used to demonstrate this responsibility and also to determine that quality management is in place. The Ministry targets are considered to be important due to the financial/funding implications. Indicators are priority because of the University rankings place of top 50 in the world, which is also stated a key output of the University quality system. Other matters relating to quality and considered at Board level, include the audit functioning reports and the informal meeting between the Deans and faculties. The role of the Board in the quality management system is also defined in terms of oversight of the two-year process established to develop the strategic plan. The role of the University's Quality Manager and Quality Specialist was also defined in terms of strategic planning and quality assurance and the coordination and implementation of quality management policies and procedures at the University.

Quality is also said to be managed by the Quality Management Steering Group (LAAVA). This group is chaired by the first Vice-Rector, and serves as the supervisor and communicator of internal and external quality. According to the documentation,

this committee defines the quality parameters and objectives; provides support and supervision; oversees the preparation of quality management policies and guidelines for quality system procedures and the assessment of their functionality. The committee members found it difficult to define the relationship between this committee and other key quality responsibilities throughout the university when asked by the audit team. This included a clear understanding of the role of the quality coordinators, and other committees and networks considering quality issues. At this point the audit team could not find evidence that the Quality Management Steering Group was actually supervising quality management.

The duties of the quality coordinator were described in the self-evaluation report as: communicating information about quality management procedures, promoting quality management in the unit and supporting the unit's leadership in quality management. However, the audit team found that the role and title of the quality coordinator is misleading. Positions varied in grade and actual position, some are part-time and some are full-time and some coordinating positions were vacant at the time of the visit. The quality coordinators appeared to be mainly responsible for communicating information about changes to the operations procedures for a particular unit as opposed to any quality performance evaluation or reporting. The University has invested little resources in the development of a strong and consistent role profile for this role.

Faculties, departments, independent institutes and other units have identified various internal groups and committees that deal with quality issues. However, the audit team found no evidence of dedicated discussion on quality matters other than the assumption that all matters discussed related in one way or another to quality. There are approximately 90 quality coordinator contacts at faculty level. It was stated that many, although it was unclear as to how many, meet a few times a year, but the audit team found from talking to the different faculty staff that the informality of such engagements was a common barrier to describing specific quality improvement actions or outcomes. Follow-up was cited by staff and stakeholders as an area that requires more work.

Discipline coordinators were also described in the self-evaluation report as being responsible for the quality of teaching provided in each discipline and for the coordination and development of teaching in the discipline. However, the audit team did not have an opportunity to pursue the level of authority, role and responsibilities of this position.

Based on the documentation and interviews the audit team concluded that that the quality system is not functioning for the various levels of management and staff as effectively as it should. The audit team found that despite the staff commitment to excellence, it is difficult for staff to understand how the actual quality system works; to describe how it provides oversight and to interpret precisely what their role is in terms of actual quality management, actions and outcomes. Moreover the responsibilities described to the audit team by the University's staff did not use the typical terms

described in the ESG such as continuous improvement; ongoing monitoring and continuous review of programmes; learning resources and student support and the continuous professional development of teaching staff.

The University promotes academic independence and the autonomy of the faculties, units and independent institutes in their expert areas. However this appears to be coinciding with an autonomous approach towards the management of those aspects of the quality system that were visible locally in each unit. The audit team found that there was little consistency in how the staff of the University conveyed their understanding of the university quality system and the context within which it operates. This was in part due to the fact that the context and the procedures follow the work of diverse units. In addition some units have not yet engaged with the operations intranet system and overall the establishment of operational procedures and the type of information displayed in the Flamma system is quite diverse. Flamma is presented as core to the quality management system, yet there are no standard operating procedures or guidelines for minimum criteria against which fit-for-purpose quality procedures can be devised. This would at least indicate what each unit must address in their procedures and provide more consistency.

The University has a range of quality metrics, benchmarks and evaluation techniques in terms of good practice that could assist each role and level towards understanding how effective their approach is to operational implementation and how they can support further the attainment of very ambitious strategic objectives and priorities. The University should consider linking the roles and relationships to the newly defined quality management system to provide a more visible, less covert, support structure for future developments.

3.3 Documentation and communicativeness of the quality system

The University has described its quality system through almost all sources of procedural and operational information (electronically or otherwise). The audit team did not find any documentation which provided an overview of a comprehensive quality system in a holistic way as many parts of the operations system were referenced as being a core part of the quality system. The audit team was however encouraged by parts of the quality system which were well developed and documented. In some faculties this was described in terms of the student lifecycle including the design and evaluation of the programme; teaching assessment and feedback; student admission progression and a variety of learning resources and support mechanisms such as those in place with the student mentoring system in the faculty of Computer Science. The student feedback system was the most common and comprehensive feature of the quality system across the university units. However, the application and implementation varied significantly in terms of feedback to students and the evaluation of its overall effectiveness as an instrument of feedback.

Flamma, one of the largest intranet systems in Finland, is the operations data library of the University of Helsinki and is described as the central document of the University's quality system or quality related documentation. Flamma is aimed at informing the members of the working community for each unit what happens in that particular community. It is accessed as an intranet. It is an excellent source of information for members of staff who are new to the University. Access to Flamma also avails some students. The Flamma system was available to the audit team to access before, during and after the site visit and the team was most grateful for this access. The establishment of this operations manual electronically is no doubt a major achievement for the University. It appears to have been a catalyst for change and perhaps a turning point with some future potential for the harmonisation of quality procedures in the University in terms of clarity and visibility of operational procedures. According to the self-evaluation report it is regarded as the optimal way to embed good practices within the University community.

The audit committee did experience many pockets of effective practice in some faculties but they were not very visible on the Flamma system. There are diverse approaches from one unit to the next on how and what information is placed on the system, which in itself is not problematic. However, the University would benefit from developing a standard set of performance indicators or metrics that could prompt units to report on and share evaluation results on aspects of their own operation that would add value and improve performance; save time and resources; and provide further clarity for students and stakeholders.

Discussions between the University of Helsinki's executive and the audit team on the analysis of staff accessing the Flamma intranet showed that some faculties that were considered by the university executive to have the most progressive examples of effective quality management practices were shown to be the least active on the Flamma system. This was an indication to the audit team that best practice is not being captured. The next challenge for the University is to decide how the phase two development can shift the Flamma system from operations information provision to a more dynamic quality system support tool. Flamma could be used to describe the more basic elements of the whole quality system. The audit team sees that the system has great potential to further develop quality enhancement and improvement.

The task of establishing Flamma was significant and the University community is to be commended for its efforts. The University is encouraged to ensure that the Flamma system is up and running in all of the units, as it is still only coming on stream in some units.

Other management tools said to provide information on the quality assurance data are set out below. Some of these systems are linked to each other, but application and access across the university would need further development:

- **TOIVO system** (not available to all) – is an operations management system which offers tools for university staff to enable them to draft target programmes and action plans and for reporting (including HR development and financial planning).
- **RAPO** – is a business intelligence model and a reporting tool with basic quality system material incorporating data from other systems (OODI) on degree studies; student demographics; publications and personnel statistics and financial indicators for each unit.
- **OODI** is the student information system
- **TUHAT** system – is a research database
- **SAP** – is the university financial reporting system
- **SAP-HR** – is the human resources system

The audit team acknowledge the considerable effort and time on the part of the University that is involved in establishing, maintaining and in some cases merging these systems. However, the value for money is a consideration as overall common indicators for interpreting data did not seem to be available to staff. Improving the "usability of analysis" is a future target for the University.

The administrative staff appeared to be linked into these reporting tools in parallel with an almost separate line of active reporting events. In many of the interviews with the staff, the administrative staff positions and supports across the faculties were in a position to provide examples of quality improvement in services in particular. The staff associated with providing university-wide services presented the audit team with many examples of systematic performance evaluation and review of services by those utilising them (internally and externally in the case of the museums).

The management information system (MIS), components and various reporting tools appear to provide a stable information system at present. However, more planning, strategic positioning and work will be required to ensure the MIS is capable of providing a dynamic integrated quality, analysis and assessment system capable of supporting the future strategic plans of the University.

Developing benchmarking statements and metrics for the quality management activities would support staff awareness and understanding of the benefits of quality work. Benchmarks would also assist staff in active evaluation and implementation of the strategic objectives and assist in determining the value, impact and cost benefit of the quality committees, advisory boards as well as activities related to internationalisation and community engagement.

3.4 Defining quality culture in a quality management context

There is no doubt in the mind of the audit team that there is at the University of Helsinki a shared sense of quality culture and pursuit of higher levels of excellence. The staff of the university are very committed to their work including the quality

of provision and a quality research ethos. Following many interviews with staff of faculties, units and independent institutes, it is clear that research perhaps takes precedence on that commitment to quality where it is part of the unit's tasks.

The senior executive of the University have a clear overview and sense of a good quality ethos, as they have identified many shortfalls in the description of the "existing quality system" and how they see it function to date in the self-evaluation report. This has provided the audit team with a very mature reflection of where things are at in terms of overall effectiveness. This is also indicative, to some extent, of an understanding and vision of what support the quality system could provide for the next phase of development.

However, the audit team considers that the University would benefit from a more direct definition of a set of shared values to provide more support for the existing vision of the quality culture. Core shared values could underpin this commitment. Typically such shared values should refer to a relentless pursuit of excellence and support for the quality of the operation through continuous improvement by evaluating the effectiveness of the way in which business is carried out on a day-to-day, week-to-week basis using system-wide indicators. For example, evaluating the effectiveness of existing feedback processes, introducing sharper feedback processes and, most importantly, closing the loop on all feedback processes. A commitment to follow-up on all university and unit level systems serves to strengthen the understanding of a culture of quality and to ensure it is in place. This is currently a weakness as recognised by the University and presented in the self-evaluation report where it is stated that making feedback processes work in both directions is a challenge.

The following statement of the University of Helsinki which reflects what they consider to define the core commitment and components of the culture of quality may require further refinement and linkage to the Quality Management Framework.

"The key manifestations of the University of Helsinki's quality culture include the commitment of staff and students to their work and studies; cooperation in compliance with the University's values, objectives and common policies; the dissemination of good practices; and continuous evaluation. Trust, engagement and responsibility constitute essential components of a quality culture. A quality culture also manifests itself in the University's human resources policy, which stipulates that the staff is treated equally and that new procedures will be developed for recruitment in order to build a thriving and inspiring work community"

The audit team considers that the definition of the quality culture should focus on one set of core quality values. This approach could specifically guide the university academic staff on how improvements are made and strategy is supported in the context of the quality system. Using quality components described by the student lifecycle in the Standards and Guidelines for Quality Assurance in the European Higher Education Area may assist in this regard. The values presented by the University

are, at present, linked more closely to those supporting the pursuit of the strategic objectives. The University of Helsinki considers *"the implementation of the strategy and the tools employed in the process are part of quality culture"*. The audit team invites the University to consider a reduction in the number of processes and committees involved and a migration from a management-led and data-centred quality system towards more a development-oriented learner-focused approach that is being supported and adopted by the academic community. This is said in the context of a committed and dedicated staff that have good confidence in the quality of their education and research provision.

4
Strategic and operations management

The strategic aim of the University of Helsinki is to deliver excellence for society. The strategic objectives indicate that this will be achieved through the goal to be ranked among the top 50 Universities in the world. In the preparation of the Strategic Plan, 2013-2016, the University applied a bottom up approach including internal and external stakeholders. The strategic plan development process led to a broad affinity with the strategy throughout the university.

The quality system is closely linked to the strategic planning and operations management. The main tool used by the University to strengthen operational coherence in order to fulfil the strategic goals is the Flamma intranet system, which is widely installed. This contains a well-structured operations manual, as well as the operations manuals of faculties, departments and independent institutes. The necessary quality management tools and procedures, such as the information systems TOIVO, TUNE and RAPO, and regular target negotiations and reports, are in place. Information produced by the quality system serve the operations management needs. However, the audit team recommends the University to evaluate the effectiveness of the existing IT tools in place to avoid overlap and to define the appropriate amount of data required in order to improve operations management and to reach the stated strategic goals.

The University is aware of its national and international position, and there is a strong commitment to follow the University's strategy in order to maintain and strengthen this position. Management at the different organizational levels are committed to the quality work. The distribution of duties is explicit and in place but could be more clearly stated as part of the wider quality context.

The linkage of the quality system and strategic and operations management at the different organisational levels at the University of Helsinki is at **a developing stage.**

4.1 Linkage of the quality system with strategic and operations management

The University of Helsinki has a clear strategy, based on the core values of truth, knowledge, a critical mind, edification, wellbeing, creativity and autonomy. It is aiming to be the best in the world by its contribution to society as a whole - it will contribute "the best for the world". Consequently the strategy or "Vision 2020" is called "Excellence for Society" (Figure 3). By directing resources to the development of a world-class research and teaching infrastructure, the University is aiming to be included among the 50 leading universities in the world (goal 1). At the same time the University of Helsinki has the goal of being a responsible social force (goal 2) and a thriving and inspiring community (goal 3). All of these aims should be reached, while finances are kept on a sustainable footing (goal 4).

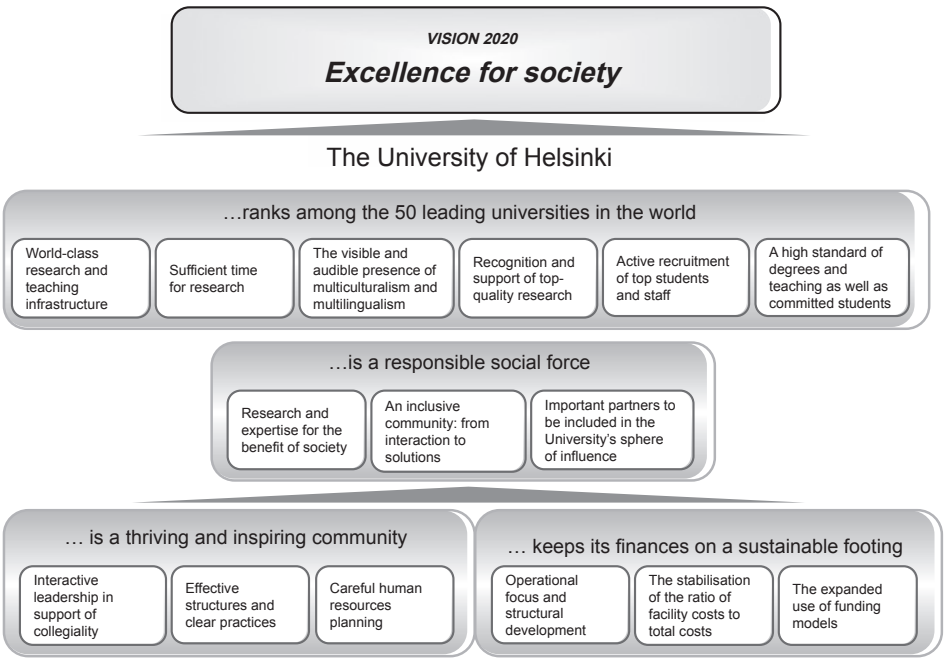


Figure 3. Strategy map of the University of Helsinki for 2013-2016.

Strategic goals are broken down into specific measures, including responsibilities and resources. The Board of the University is responsible for the policy guidelines, and the Rector is responsible for the implementation of the objectives. He is supported by the strategic planning process and the coordination of the strategy and operations management processes.

The audit team could verify during the interview process that the Board of the University places a strong emphasis on the development and implementation of the strategy. It has established an audit committee which meets on a regular basis and supervises the policy programmes; the appropriateness of financial planning and reporting; the preparation of financial statements and the efficiency of internal monitoring and audits. The leaders of the units (university, faculty, department, independent institutes) are responsible for the strategic and operational management. The implementation is assessed annually.

The University has defined that the purpose of the quality system is to

- facilitate the achievement of the strategic objectives (both at the university and unit levels), and
- allow for continuous assessment and improvement of operations by offering tools and identifying areas for development as well as providing reliable monitoring and assessment data for operations management.

The operations management of the strategic planning process of the University includes instruments such as the agreement between the University of Helsinki and the Ministry of Education and Culture, target negotiations between the Rector and the faculties, target negotiations between the faculties and the departments, annual seminars on objectives and results and various leadership meetings. Target programmes are updated once a year.

The University is aiming to ensure quality by means of its framework for operations management. The University leadership monitors the implementation of objectives through a system of reporting submitted by the units. The units are responsible for taking corrective measures and action as required by the feedback received. Unit leaders are also responsible for bringing their targets within the required budgetary constraints.

The interviews during the audit visit showed that there is a clear commitment to quality, as there is to fulfilling operational and strategic goals. It was not quite as clear to the audit team whether the interviewees knew about the stage and development of their own unit's work. As a consequence, the definition of measures required to achieve improvements could be difficult. Knowledge of best practice examples could assist staff in defining the measures to develop the quality. The audit team considers, for example, that the annual seminars could be used as platforms to spread good practice on operational issues.

The monitoring system installed for the strategy period 2013-2016 is based on biannual reporting, covering most of the indicators and quantitative follow-up items that have been assigned objectives. Financial reporting follows a three-year cycle. The indicators followed are a compilation of indicators agreed in the follow-up of the University of

Helsinki Strategic Plan and the Ministry of Education and Culture. The audit team considers that this difference in the two reporting cycles could be an obstacle in streamlining financial and strategic planning.

The documentation of operations management is organised electronically, and there are several IT tools installed. The most important ones are the TOIVO operations management system, the RAPO reporting tool, and the new Flamma intranet. These tools serve the operations management needs and enable the Rectorate to manage operations. However, for the time being, there are still some limitations to these systems with regard to their availability and access for everyone at the University, the level of usage, and the language barrier for English speakers and others. However, at present it is difficult to see what distinct activities and procedures are in place to provide a quality framework for evaluation and review of performance. There is a lot of procedural information in Flamma but the university could consider including also few metrics to indicate how a unit will review its performance, how the feedback systems gather information and actually feedback into the unit. The audit team sees that Flamma has excellent potential to become an enhanced support for sharing good practice in the next phase of development.

RAPO is a unit reporting tool designed for continuous specific monitoring. It receives indicator data from other source systems. It is not available for all to use yet but all staff technically have access. The system was launched in 2012 but is still experiencing technical challenges as part of the development. Some staff from units that the audit team met with were not currently linked in to RAPO. It was not clear to the audit team how effective RAPO is in "supporting leadership, common understanding of goals and their attainment". The potential of course is there.

The audit team got the impression that there is a lot of information produced by the University but perhaps it is not always used as efficiently as possible. The self-evaluation report also indicated that this is the case with perhaps too many, sometimes overlapping or conflicting IT tools in place which makes financial monitoring a challenging task. The audit team considers that it is necessary for the University to evaluate the effectiveness of the existing IT tools in place to avoid overlap and define the appropriate amount of data required in order to improve operations management and reach the stated strategic goals.

The University places great importance on the interactive forums, such as meetings between the Rector, the Deans and the Heads of Department, and other forums in the faculties and other units. These forums typically support an information flow in two directions and between different organisational levels. The density of these platforms again confirms the commitment of the University stakeholders to improve operations. The University would benefit from making the concrete benefits and progress of these forums more visible.

4.2 Functioning of the quality system at different organisational levels

As mentioned above, the quality system and operations management are closely linked. This is true for all organisational levels. The roles and responsibilities of the staff on the different organisational levels are well defined in the operations manual that are located in Flamma. However, the operational structure of the University of Helsinki is complex. University units can sometimes act very independently, and challenges differ substantially from one unit to the next. The audit team found evidence of this presented by staff representatives during the interviews, in particular, those units that were located outside the city centre campus.

The audit team was informed, during interviews with staff, that everyone complies with the main strategic goals of the University. The general acceptance of the strategy is well developed. At the same time the audit team experienced that the knowledge of the strategy in more specific detail differs from organisational level to organisational level and from unit to unit. This of course goes hand-in-hand with the ownership of strategic projects, which is more developed in some units than others. It could be useful for the University to intensify the dissemination of information on strategic issues. The well-established information channels should make this an easy task. Although the responsibility for the implementation of the strategic goals of the University of Helsinki is with the leaders of the units, it seems that there is room for improvement concerning communication between the different levels within the units.

This is one of the main reasons why the audit team got the impression that the roles, or at least the specific responsibilities, were not clear to everyone. As a consequence, the individual roles and responsibilities were sometimes underestimated and staff contributions at meetings are more informal. The establishment of clear more formal procedures rather than the use of informal channels for staff contributions could have a much stronger and more positive impact on the effectiveness of quality work.

Based on the interviews the audit team concluded that the role profile of the quality coordinators does not conform to the description of the self-evaluation report and the expectations of the audit team members.

The audit team found that the recently revised Academic Affairs Council is a good example of where quality issues relating to teaching and learning were discussed at a number of levels. The Council strengthens the institutional communication and interaction between the Rectorate and the faculties. At the same time, it provides a formal forum for the discussion of pedagogical issues and for providing feedback to the vice Deans.

The same is true for the Academic Research Council with regard to the research activities of the University of Helsinki. The same vice Rector is chair of both councils to ensure that different strategic or clashing approaches are not taken.

The University has implemented organisational changes in recent years, for example the three-level structure was streamlined. As pointed out in the interviews during the audit visit, especially by the Rectorate, this reorganisation seems to be making progress. Ongoing challenges of course will continue to place some pressure on the organisational structure. The audit team recommends that the impact of the changes should be evaluated by the University after some experience of the system is gained.

Information about the University's operations is obtained by evaluations and feedback procedures. Suggestions from them were considered when preparing the Strategic Plan and target programmes.

A system for monitoring the implementation of the strategic plan, 2013-2016, has been established. The University Board receives a report on the outcomes of the first six months of the year. The number of degrees completed is published on a quarterly basis, financial reporting follows a triennial cycle. Various source systems are used to aggregate the information for the reports. The RAPO IT system plays an important role in the continuous monitoring of unit-specific objectives.

There is a comprehensive information base provided at the University of Helsinki. A considerable range and sequence of reports includes sector-specific analysis. Nevertheless the audit team considered that there is a governance issue in dealing with data collected through indicators. For example, there seem to be numerous indicators and sometimes the accuracy is criticized as not being optimal. It is a matter for the unit leaders, to use and interpret the information produced, and to prove its usefulness. This leads to the situation that in practice it is mainly the number of completed degrees and the number of publications produced that are considered when the allocation of personnel and financial resources are decided. The audit team suggests that the University evaluates the set of indicators being used to provide better support to the unit leaders in the management of their operations.

The annual reports of the units and the feedback by the Rector appear to play a key role in the implementation process of strategic objectives. However, corrective measures can only be taken when the quality of the feedback is adequate. The audit team therefore recommends the evaluation of the Rector's feedback and the development of a formal format for feedback. As pointed out in the self-evaluation report by the faculties and independent institutes, the feedback should not cover information that is available through the existing information system or other sources. Instead an analytical approach should give the unit leaders clear guidance.

5
Development of the quality system

The development of the quality system of the University of Helsinki has been continuously linked to the improvement of the operations management and to the development areas of the strategic plan. The development of the system has been based on the results of external evaluations and there is lot of evidence that the development of the quality system after the first audit has been active and several efforts to further develop a consistent quality system and operations management process have been implemented. For example, the University has made great efforts to increase the access and availability to the quality tools and processes for the whole university community, including the international community and has succeeded rather well in this, taking into account the tri-lingual nature and the size of the University.

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

5.1 Procedures for developing the quality system

The development of the quality system of the University of Helsinki is described in the self-evaluation report as a process that started initially in the 1990s. The development process includes seven stages from the first international evaluations of administration to a quality culture. The identification of the areas in need of development have to a great extent been based on the results and recommendations of external evaluations of research and education. The development has focused on the following elements of the quality system: development of the strategic plan; quality management and operations management; improvement of the quality of enterprise architecture and information systems and development of evaluation; development of the quality of processes and services; visits by the Vice-Rector and quality specialists to the units; and quality networks and field-specific committees.

The self-evaluation report and the interviews during the audit visit gave the audit team the impression that the quality system is partly implicit on a systemic level. This nature of the system made it difficult for the audit team to clearly identify the

development process of the quality system. The interviews during the audit visit indicated that the University has not yet succeeded to communicate the system as a holistic and clearly defined system. At the University a consensus seems to exist about the high quality culture and ethos, the strive for excellence, the necessity for common guidelines and the existence of good practices here and there. The staff, stakeholders, as well as students welcome the enhanced strategic leadership in general. All these are promising signals for the future development.

Development projects are ongoing in almost all the parts of the quality system. Many of the recent development projects have been user-driven and strategic. Examples of these include the development of the operations manual and the renewal and integration of the information systems. These processes have been laborious and have taken rather a long time. However, it seems to be, that overload of information and several practical changes are blurring the big picture and making it difficult for the staff, students and stakeholders to describe and grasp the quality system and development of it in a nutshell. The development of the system could be introduced to the staff and students, for example, by presenting simple diagrams and digital narratives in Flamma.

The development of the quality system concentrates on the guidelines and tools, indicators and information architecture. This is understandable in a big university and can be seen as a necessary phase towards the second, even more dynamic phase. However, the audit team would recommend more support for human capital, quality coordinators and several networks, which already show evidence of great potential. The Teachers academy, the Network of Senior Lecturers in University Pedagogy and several vertical network groups are examples of good practice tools that could be shared in order to enhance the dynamic and communicative nature of the quality system.

The nuances in quality assurance between faculties and units, based on their unique nature, are often referred to, but they are not transparently defined. The quality system also lacks the capacity to target the weak areas effectively and encourage system improvement in a more systematic and constructive way.

The University has conducted several international evaluations on its own initiative but noticed that, in many cases, they have not been as useful as intended for an international university. The University also found the evaluations to be rather laborious. However, international evaluations will no doubt continue to be used and in the future, their relevance, timing, scope and nature should be considered to lighten the burden of staff and enhance impact. They are definitely necessary and a good practice although they are not yet as functional as they could be.

The operations manual is well known and widely used. The effects and impacts of the operations manual are likely at least to harmonize processes and guarantee equal services in each faculty and unit. The annual process of reviewing the operations manual from the point of view of end-users is a good practice and covers the whole system. However, the review is conducted by a group of selected specialists. The other mechanisms to develop the operations manual based on feedback remain less clear.

Many processes are underway to consider reporting tasks and information systems and sources and efforts are in place to continue to develop the enterprise architecture. This is a very good development in principle. There is evidence that the procedures for evaluating and developing the quality system are functioning. However, the audit team recommends the University to further develop the system in order to effectively identify the strenghts and areas in need of development. Also the steps planned or taken should be presented in a clear and conrete way.

5.2 Development stages of the quality system

The first FINHEEC audit of the University in 2008 was provided important momentum for the development of the quality system and the University has followed the suggestions of the audit carefully. The self-evaluation report contains a clear presentation of all the recommendations and follow-ups.

The University has achieved good results in harmonizing the information systems concerning the results and critical indicators and in collecting reliable and up-to date data. The indicators are being developed to better meet the critical and strategic targets of the University. The usability of the information produced by the system was raised also in the self-evaluation report as an area in need of development. Descriptors for the interpretation of the RAPO data and how the Flamma and RAPO systems link to the Quality Management Framework may assist in understanding how these systems will also help the academic staff to evaluate and boost performance and support evaluation of how things are done. They may also devise, for example, appropriate quality measures to determine whether the teaching and learning for a particular programme is at the correct bachelor level.

In the development of the quality system, the aim for the years 2013-2014 was the introduction of the new intranet, that aims to integrate quality-related documentation (operation manuals) into a coherent whole and a transition from reporting to the production and management of information. This project, which has focussed on the documentation of the quality system, has been one of the most effective development projects. The operations manual is the central document of the University's quality system. New procedures to review the operation manuals of faculties, departments and independent institutes have been introduced and the operations manuals are integrated into the Flamma intranet. Flamma has been developed based on information of user needs and is evaluated regularly. One example of this is that the university has already concluded that a new information architecture is needed to support both vertical and horizontal and hyper-textual flows of information.

According to the interviews, the best-known and regularly used parts of the quality system for the university staff are Flamma, the Operations manual, RAPO and TOIVO; the Teachers Academy; the Network of Senior Lecturers in University Pedagogy; student feedback, laboratory specifications; sectorial standards, and the rules of competitive

funding. The staff interviewed by the audit team mentioned these, often in a positive way, although talked about them as rather static frames of reference or tools.

The University is keen to develop processes and their efficiency, which reflects the higher education policy and funding formula in Finland. The customer (students and stakeholders) needs have to be kept in mind in a balanced way as basic drivers of system development.

The University's risk management is considered by the audit team to be weak and needs improvement. Risk management did not feature highly in discussions with staff during the site visit and conceptualisation of the risks and their further management seems to be underdeveloped.

The audit team did not get a clear picture of the workload caused by the quality work. Translating the quality system into several languages has been expensive and constructing common guidelines and information systems was laborious. International evaluations involve a lot of work according to the self-evaluation report. However, the actual quality work in the everyday work of the university and ensuring that the high quality processes are effective and are not considered to be laborious. In some cases it was considered to be very satisfactory and a natural feature of the work.

6 Quality management of the HEI's basic duties

6.1 Degree education

The quality management procedures related to the planning and implementation of degree education enhance the overall effectiveness of the quality work at the University of Helsinki and provide evidence of continuous improvement. Feedback is taken seriously, although in some cases a closure of the feedback loop is missing. Degree programmes show strong commitment to working life and assure broad employment prospects for their graduates. The involvement of external stakeholders in the planning and implementation of education is generally appropriate. Key support services function well and assist both academic staff and students in their everyday work.

Nonetheless, there is room for further improvement in a number of areas. The University of Helsinki could place more emphasis on harmonizing the quality procedures across degree programmes. Currently, there are differences in the way units apply quality operations. What appears to be lacking is an institution-wide discussion to support the collaboration between faculties and departments. A related challenge is that there are some excellent examples of good practice across degree programmes. However, they have not been shared in a sufficient manner. Finally, the University of Helsinki could benefit from developing more qualitative indicators for degree education in its strategic documents.

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

6.1.1 The objectives for degree education

The management of education at the University of Helsinki encompasses the entire academic community situated within the departments, faculties, independent institutes and the University as a whole. The quality assurance of degree education is part of the operations of the University, and is considered both as a collective and an individual

responsibility. According to the Regulations on Degrees and the Protection of Student's Rights (Section 46), the responsibility for the quality of education is shared between the following:

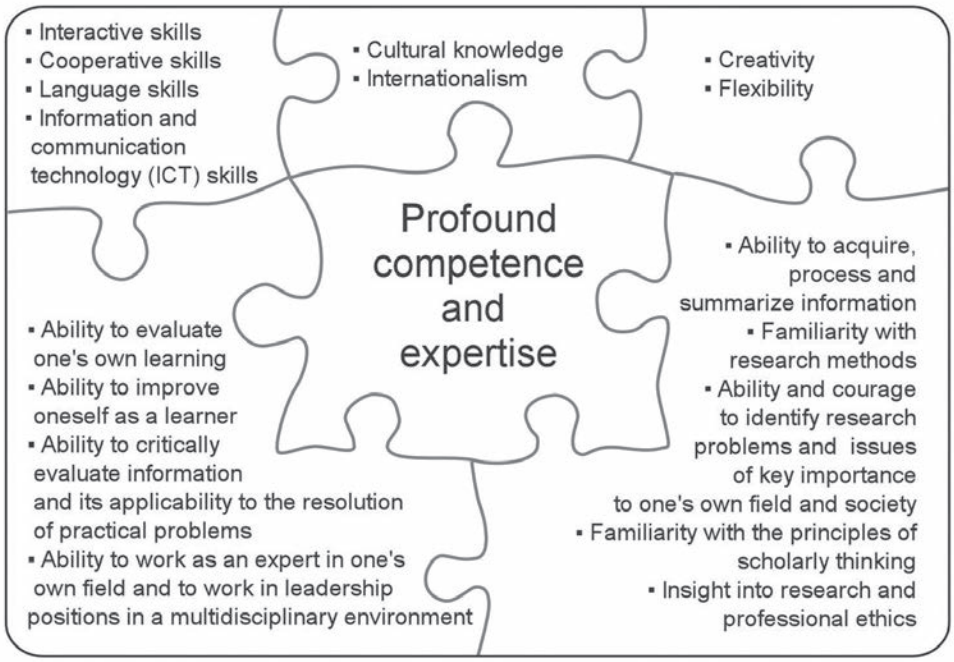
- *The University* shall be responsible for the overall quality and resourcing of education.
- *Faculties* shall be responsible for the quality of their degrees, the attainment of agreed objectives, and for the allocation and prioritising of resources granted for education.
- *Independent institutes* offering education shall each be responsible for the quality of the education that they provide.
- *Units* providing teaching and their heads shall be responsible for the quality of the teaching provided and the studies completed in the unit concerned.
- *Discipline coordinators* shall be responsible for the quality of teaching provided in the discipline and for the coordination and development of teaching in particular.
- *Teachers* shall be responsible for the quality of their teaching and for the assessment of learning.
- *Students* shall be responsible for the progress of their learning and studies.

The definitions of the quality of education at the University of Helsinki have been drawn transparently and holistically, governing the whole university. According to the audit material, the standards and quality of education, teaching and learning are defined in a number of strategic University-level documents, including:

- The Strategic Plan of the University of Helsinki (2013-2016)
- Regulations on Degrees and the Protection of Students' Rights
- The Teaching Philosophy of the University of Helsinki
- Assessment of studies, theses and dissertations
- The Teaching Evaluation Matrix

However, the stated objectives of the University of Helsinki's quality system do not provide a direct reference to the basic core duties of the university - teaching, learning and research. Hence, it was difficult for the audit team to establish a clear connection between the university's quality objectives and the objectives set for degree education.

The all-embracing goal of degree education is to ensure that teaching is carried out in accordance with constructive alignment, and that students have the opportunity to complete a high quality academic degree. In addition, the aim of the studies pursued at the University is to provide profound competence and expertise-based scientific research. According to the teaching philosophy of the University of Helsinki, teaching and learning are always based on research.



(Components of an academic degree of high quality at the University of Helsinki)

Figure 4. Jigsaw Puzzle Figure - ref 1997.

In its Strategic Plan (2013-2016), as part of its vision to become one of the 50 leading universities worldwide, the University of Helsinki emphasizes the goal of providing a high standard of degrees and teaching. To achieve this aim, the University has developed a number of steps to be taken (e.g. increasing emphasis on study progress and learning outcomes; curriculum design and work plans; interactive learning environment). However, these strategic degree measures remain on a somewhat general level and the University would benefit from developing more concrete action plans on the faculty and departmental level. Differences between faculties and departments should be taken into account when devising these implementation guidelines. This process may also involve difficult decisions about prioritizing the implementation of some goals over others.

A related challenge in this regard is to devise separate short-term and long-term degree education implementation strategies. Even though the requirement for developing strategic cycle plans every four years comes from outside the University (e.g. the Ministry of Education and Culture), this should not prevent the University from developing a sustainable long-term strategic horizon over longer planning periods. The long-term cycle should be long enough to allow the accumulation of data from more than one short-term cycle, since detecting the effects of a certain reform is often a slow process stretching across several cycles. Obviously, such long-range planning of degree education can be fairly general and there is no doubt that some re-planning

will be essential between planning cycles. Such recognition of the need to amend the plans should not always be considered as an indication of the failure to plan, but rather as a sign of the ability to identify something that is going wrong before it happens.

6.1.2 Collection and utilisation of data

The University of Helsinki collects a large variety of data to monitor the development and improvement of degree education. Some of the targets are based on the University's Strategic Plan and the associated Target Programmes, whereas others have been agreed with the Ministry of Education and Culture and are included in the model for allocating public funds. Some of the key numeric data collected with relevance to degree education include the number of applicants/admitted students, student/teacher ratio, number of students who complete 55 credits per academic year, the number of completed degrees, and the employment of graduates in positions corresponding to their academic qualifications. As these indicators are primarily of a quantitative nature, the University could benefit from broadening the scope by placing more emphasis on developing qualitative indicators in its strategic documents. Although the assessment of qualitative indicators is less straightforward than that of quantitative ones, the advantage is that they provide more in-depth information which is often difficult to be expressed in numbers. For example, the Annual Review from 2013, states that the University fell short of achieving its target for first cycle degree (87%), but provides little qualitative analysis of the reasons behind such numbers, which limits the interpretation of the data.

The University of Helsinki uses an extensive number of electronic systems (e.g. RAPO, Oodi) to aid the collection and analysis of data relevant to degree education. The current feedback system includes both nationwide surveys, and institution-specific practices. While the collection of versatile and continuous feedback testifies to a well-developed quality culture, the information gathered is not entirely used in the best way possible to support operations management, nor are the various feedback systems always well connected to each other. As the number of feedback channels is plentiful, there is a repetition in the collection of feedback as some of the surveys are partly overlapping – thus, adding a challenge to the effective quality steering at the institutional level. In light of this, the audit team sees that a rationalisation of feedback methods could provide more adequate, timely and reliable information to aid decision-making.

All the students interviewed by the panel, believed that their feedback has had an impact on the planning and implementation of education. However, as one student pointed out, this cannot be concluded with a high degree of certainty, as students usually enrol on a certain course only once. In this regard, the university must stress the importance of closing the feedback loop and letting students know what actions have been taken in the light of their input. Such a measure will further reflect the openness and transparency of the institution, and can be helpful in encouraging continuous feedback from students.

The knowledge-sharing and exchange of good practices between faculties and departments is one of the main structural development targets in need of improvement. While one of the main purposes of the University of Helsinki's quality system, as stated in the self-evaluation report, is to "disseminate and establish good practices", the audit team found little evidence that such undertaking takes place. Cooperation and dialogue in the preparation of degree requirements is often scarce between different units. The faculties (and even some departments within the same faculties) are, to a great extent, distant from each other and their knowledge of and interest in matters outside their immediate environment is rather low. The audit team noted that some faculties which were considered to have numerous examples of effective quality management practices, were shown to be less visible on the Flamma system, indicating that best practices are not always captured in an adequate manner. Hence, the University leadership must think of ways to encourage and incentivise cooperation between faculties and departments, otherwise it risks limiting the development and availability of cross-disciplinary activities.

The use of Flamma might be a good initial step to ensure the flow and transfer of good practices and development ideas between programmes, at almost no cost; although in the long run, the University would benefit from developing more comprehensive tools to define and promote joint practices. Both students and academic staff mentioned the Flamma intranet platform as an important source of information about quality related issues. While Flamma is becoming a major information channel and a natural part of operations, the university will need to decide on the ways of shifting the Flamma system from information provision to a more dynamic quality support system.

6.1.3 Comprehensiveness of the quality system across degree programmes

At the University of Helsinki, the planning of education is to a large extent rooted in the faculty and departmental level, and most of the discussion concerning teaching and learning principles is done on these two levels. As a result, what appears to be lacking at present is an institution-wide discussion to support collaboration between faculties and departments in the planning of education.

The Academic Affairs Committee is stated to have a key role in overseeing the quality of teaching on the faculty level, as well as monitoring the implementation of the target programme and devising a plan for its implementation. However, during the interviews, the audit team found little consistency of the understanding of the role of the Academic Affairs Committee among different stakeholders. A wide range of issues were considered to belong to this committee.

Course descriptions of degree requirements are easily accessible. In most cases, they clearly and systematically describe the curriculum, the learning objectives, the teaching methods and the means of assessment of learning. All the interviewed students knew where to find course information and were clear on the course expectations and

requirements. Each faculty has its own Student Affairs Office where students can consult on issues concerning curricula, examinations, degrees and course requirements. However, the University might benefit from standardizing these course descriptions across units, for instance, by introducing common templates or shared curriculum design tools, in order to assure that all necessary elements have been covered in a meaningful manner.

At some faculties and departments, the quality of degrees is compared to European standards (e.g. through accreditation or benchmarking), however, this practice is not equally present across units. The audit team recommends University of Helsinki to consider including international peer reviewers or external advisory groups in the process of planning education (e.g. in designing the curriculum, selection of assessment methods) on a pilot basis and assess the effectiveness of such a measure. Among other things, this would be a good opportunity for the University to improve its international cooperation and incorporate new pedagogical approaches into its degree programmes.

In terms of the length of the cycle for reviewing the curriculum, the audit team found major discrepancies between faculties. In some faculties, the curriculum is reviewed annually, while in others amendments are done periodically after two or three year periods, following the so-called 'pipeline model'. Although continuous improvement of the curriculum is desirable and somewhat expected, especially in fast-changing subject areas, the University should ensure that there is a balance between change and stability, as it is not always easy to differentiate the latest fad from a meaningful curriculum intervention.

When a new curriculum is created, individual lecturers have a significant degree of freedom in designing the course. A high degree of freedom is particularly evident for elective non-mandatory courses, where the curriculum restructuring is rather proactive, and changes can be made more easily compared to mandatory courses. The preparation of the curriculum is usually discussed by Departmental Steering Groups and is later confirmed by the Faculty Council based upon a proposal submitted by Department Councils. In some departments, there also appears to be a practice of informally receiving feedback on the content and the overall quality of the curriculum by peers at the department level.

Students have good opportunities to influence degree requirements and have an important role in drafting the curriculum. While course feedback is used as a tool for curriculum planning and revision, there is much room for improvement in the use of students' personal study plans to this end. The employment relevance of the curriculum is often utilised in curriculum design, particularly in vocational-oriented programmes, but external stakeholders do not always participate actively in this process. The relevance of the degrees to working life is also reflected in the high percentage of students who receive opportunities for employment, either during the course of their studies or immediately after the graduation.

In terms of the general well-being, the academics interviewed by the audit team were very committed to the improvement of degree education and spoke about the University as an inspiring, encouraging and rewarding working environment. In a similar fashion, the interviews with students showed that their overall student experience is very positive, and that they have high appreciation for the work of their lecturers. The impression of the audit team is that the interaction between students and lecturers seems to be open, and the learning atmosphere appears to be relaxed.

The teaching methods are developing in a versatile direction and academic staff are encouraged to experiment with new pedagogic innovations in teaching (e.g. problem based learning, case methods). As far as individual courses are concerned, the academic staff are fairly autonomous in deciding on the methods of teaching. In order to promote high quality teaching, the University of Helsinki provides its academic staff with sufficient opportunities to participate in pedagogical training. For instance, The Centre for Research and Development of Higher Education carries out regular pedagogical courses for academic personnel. The Network of Senior Lecturers in University Pedagogy is another permanently funded part of the development strategy of the University, which provides a good foundation for sharing new practices and expertise in university pedagogy, within and outside the boundaries of the university. The Educational Centre for ICT also enhances the pedagogic use of newest technologies in teaching and provides academic staff with services, support and training related to the use of educational technology and web-based teaching. As the participation in the various pedagogical training is on a voluntary basis, further priority should be given to encourage academic staff to participate in courses on university pedagogy in order to assure that all staff involved in teaching have minimum pedagogical training. The establishment of the Teachers Academy in 2012 has increased awareness of pedagogical education even further, and has served as an indication of the value that the university community places on the quality of teaching. The so-called "Teacher Cafés" have also served as a platform for informal exchange of teaching practices and experiences.

The University of Helsinki recommended that faculties use the Teaching Evaluation Matrix, which defines the University's perception of the quality of teaching as a process. However, the audit team did not get the impression that the matrix is widely used. Some of the interviewees pointed out that the Teaching Evaluation Matrix needs revision, but failed to provide concrete reasons to support such a statement. In addition, there was no clear indication, either in the self-evaluation report or in the interviews, of how the lack of use has been addressed so far.

The methods for the assessment of learning are usually conducted as mid-course formative assessments and/or as end-of-course summative assessments. If the only course feedback that students receive is the final grade, the lecturer should consider whether this is sufficient for the students to enhance their learning. Many of the students also require more feedback on their skills development during the course. According to the Self-Evaluation-Report, when new teachers are recruited, one selection criterion is the command and development of evaluation methods for

teaching and learning. Yet, the methods for assessment of learning are still not sufficiently diverse and tend to rely on traditional paper-based examination. Hence, the audit team encourages the academic staff to aspire to new and innovative ways of assessment of learning.

6.1.4 The involvement of different parties in the quality work of degree programmes

The University of Helsinki has a strong tradition of democratic and inclusive decision-making. All relevant stakeholders groups – academic staff, students and external stakeholders – participate in the planning and implementation of degree education in a meaningful manner, through a variety of feedback and decision-making processes. However, the actual means of participation of different stakeholders could be further improved.

It goes without saying that academic staff members are well represented in the various decision-making bodies and have numerous opportunities to influence the development of degree programmes. In a similar fashion, the University is highly committed to ensuring the participation and representation of its students in decision-making. They have elected representatives in the decision-making bodies at all levels at the University - a right which is guaranteed both by national legislation and the specific regulations of the University. The Student Union (HYY), an independent body enjoying legal status, selects student representatives for the administrative organs of the University, while some faculty and subject-specific student organisations are also asked to appoint their representatives in various study-related work groups and committees. The audit team commends the efforts of the Student Union and the subject-specific organisations in supporting the work of student representatives, and increasing the number of students potentially interested in being representatives. One example of such an effort that deserves attention in this report is the so-called Halloped Wiki[3] (Student Representative Wiki) – a guide developed by the Student Union in order to assist the work of student representatives.

Besides the academic staff and students, external stakeholders also participate in the quality work of degree education at the University of Helsinki. The connections of individual departments with the business sector are significant, and their expertise is used both in the planning and in the implementation phase of degree education. The members of the business community are widely consulted to ensure that a certain degree meets the requirements and skills needed in the labour market. While the University receives stakeholder feedback from alumni in various ways, it could take better advantage of their strong commitment and support towards the institutional

[3] http://hyy.helsinki.fi/halloped

goals, by engaging them in the quality procedures on a regular basis. To this end, the University should make an important distinction between stakeholders and audiences. In the present form of engagement, the alumni falls closer to the latter, and the quality system in place does not engage with them to the same extent as it does with other stakeholders (e.g. from the business community).

6.1.5 Support services

The University of Helsinki provides a wide range of support services (e.g. a careers service, research and education services, library services, IT services, sports services, student services, language services) managed on a central and/or unit level. Each unit is in charge of its own services and their development, but certain units (mostly in the biological and medical sciences) often provide a range of services for several other units. Services offered at the central level are the responsibility of the Director of Services and the Heads of Services, who meet regularly to discuss the quality and efficiency of the services on offer.

The University employs several feedback systems both on central and unit levels, to assess its services. In most cases, the services provided are evaluated on the basis of customer satisfaction surveys collected from students, teachers, researchers and other groups using the services. While some support services are evaluated regularly, others are subject to assessment for specific purposes only, and each service unit has its own way of handling and working with the data gathered. Although the variety of feedback methods in use produces much relevant data that may be particularly useful for the evaluation of a certain service, a more systematic approach for structuring and processing the information gained across different service units would further benefit quality management, in terms of providing a better overall view of all the existing services. The audit team believes that the creation of overarching benchmarks to evaluate all support services might be one useful tool in this respect.

The students and academic staff interviewed by the audit team expressed general satisfaction with the support services on offer, and did not perceive any major discrepancy between the available support services across campuses. Although the support services received positive views, and the number of support services available is noteworthy, the University may, from an organisational point of view, benefit from making a clearer distinction between the service and the administrative function, as some of the practices that fall into the service category (e.g. records management and archiving) can also be classified as pure administrative duties. The audit team recommends that the University consider if there is any potential negative impact from the way these areas are currently divided.

6.2 Samples of degree education

6.2.1 Bachelor's and Master's degree education programmes in Computer science

The quality management procedures of the Bachelor's and Master's degree education programmes in Computer Science are well-established and support the planning and implementation of education in an excellent way. Degree requirements are continuously and systematically reviewed to respond to the fast-changing environment in the subject area. The degrees conferred by the Department are socially relevant and successfully foresee the needs of the labour market. The connection between teaching and research generally works well and both benefit from one another. The teaching methods in use are varied and foster innovative and creative teaching. While problem-based learning has been increasingly used, conventional examination methods remain the dominant mode of assessment. The Department provides an encouraging and supportive environment for both students and academic staff, fostering close interaction between them. Feedback systems provide a wide range of useful data. However, additional efforts should be made to collect this data for a comprehensive programme-level evaluation.

The quality management of the Bachelor's and Master's degree education programme in Computer Science is at an **advanced level.**

Introduction

The Department of Computer Science, as part of the Faculty of Science, is responsible for teaching and research in computer science at the University of Helsinki. The basic degrees offered in computer science are the Bachelor of Science (BSc) and the Master of Science (MSc). The programmes have a strong international profile, as part of the teaching is conducted in English and about one quarter of the academic staff is foreign. The high rate of international staff helps the unit to achieve the wider international vision of the University of Helsinki. The number of international students is also continuously increasing.

As highlighted in its Strategic Plan, the Department strives to become "the best computer science department in the Nordic countries" by the year 2020. The Ministry of Education has selected the Department as one of the ten national Centres of Excellence in university education in two consecutives cycles (2007-2009 and 2010-2012). Furthermore, in the most recent international assessment of the quality and standard of research carried out internally by the University of Helsinki, the Department was awarded with the highest possible grade. After 2012, no other national centres were selected.

Planning of Education

The requirements for the Bachelor's and Master's Degrees in Computer science have been continuously reviewed in order to respond to the fast-changing developments in the subject area. The preparation of the content of degrees is carried out strongly bearing in mind international developments in the field, as external international recognition has a significant role in the programmes quality assurance. The preparation of degree requirements involves a department-wide discussion, with strong student representation. However, there seems to be a limited participation of alumni and external stakeholders in the planning phase of education. The audit team therefore recommends the University of Helsinki to consider the involvement of alumni and external stakeholders in a more systematic way.

The development and the design of the curriculum is proactive and the course planning is based on so-called principal themes that are covered during teaching. Curriculum changes are made periodically (every two years) and the curriculum is often compared with partner institutions, however this process is not explicitly systematized. The practical relevance of knowledge is mainstreamed in the curricula, while the Department continues to adhere to its goal of providing academic expertise. The learning objectives for individual courses are made explicit and easily available. All students interviewed agreed that the pedagogical aims and requirements set are followed during the implementation of courses.

The Bachelor's and Master's degrees in computer science conferred by the Department maintain a high standard and are socially relevant. The Department has been particularly successful in its capacity to foresee the needs of the labour market and has a well-established record of cooperation with the world of work. Cooperation takes the form of joint research projects, visiting lectures and the organisation of various activities and competitions, such as Code Camps and Hackathons.

Students have good opportunities for employment and many of them enter the job market at an early stage of their studies. While this trend of early recruitment of students could be seen as a recognition of the quality of the education provided at the Department, the early employment of students has led to delayed completion times or even drop-outs. The national legislation on limiting the time span of degree completion can have only limited impact on tackling this issue and therefore, the Department should stress ensuring the commitment of students to their studies. The audit team would like to encourage the Department to make more effective use of the Etappi check point system to support smooth study progress and, consequently, the completion of degrees.

The connection between teaching and research generally works well and both benefit from each other in a number of ways. The Department, follows the institution-wide principle, whereby all academic staff have responsibility to teach and do research, as an integral part of their duties. Teachers are expected to use state-of-the-art research

as basis for their teaching. The NODES Laboratory and the Software Factory are only two of the many good examples providing evidence of the linkage between research and teaching activities at the Department. The opportunities for students to participate in Departmental research projects are available from the beginning of their studies. However, not all students engage in such activities.

Implementation of Education

The Department of Computer Science employs a large variety of teaching methods and encourages the use of ICT tools as support for learning. An increasing share of the teaching is based on online courses and e-learning as a way to foster innovative and creative teaching outside the traditional boundaries. For instance, the recent introduction of MOOCs is a strong indication of such commitment towards the diversification of learning methods. However, they are currently only available in Finnish which significantly limits their international outreach. Starting from 2012, the Department has used MOOCs as a semester-long entrance exam to studies. According to the results of a recent study done by members of the Department (Vihavainen, Luukkainen and Kurhila, 2013)[4] the achievement of students admitted via MOOC are as good as those enrolled by the standard intake procedure. In addition, the initial findings point out that those students who have taken the MOOC are less likely to drop out of their studies during their first year. While the audit team encourages the Department to further investigate the potential use of MOOCs in different areas, it should also think of ways to define their role as part of conventional quality assurance operations.

As stated in the self-evaluation report, the academic staff at the Department has a long-term research record in publishing research on student-centred teaching methods and flexible learning environments. A notable feature which contributes to the use of versatile teaching methods is the established practice of teacher rotation. The frequent use of visiting and guest lectures further ensures a fresh perspective in the delivery of education. Peer teaching is also an activity favoured by the Department as students in their final year of study can be recruited as hourly paid teachers when necessary.

The principles and objectives of evaluation of learning are clear and theoretically well-grounded. The Department has prepared a guidebook which recommends how assessment should be carried out. The methods used to assess learning are often based upon several factors (e.g. written/oral presentation, participation in class, lab work exam) contributing jointly to the final grade. As stated in the self-evaluation report, the Department "encourages diverse and versatile methods in the evaluation of learning, as long as constructive alignment is maintained", but there is still room for improvement. While problem-based exercises have been increasingly used, conventional examination methods have been the dominant mode of assessment. Hence, further

[4] https://www.cs.helsinki.fi/webfm_send/1254

efforts should be made to supplement teaching-driven assessment techniques with student self-assessment practices that would enhance the quality of student learning. For example, students can provide a self-assessment on their individual contribution to a group project, which can then be integrated into their final grade.

The Department is proactive towards pedagogical training. This is evidenced by the large number of staff who have already taken part in pedagogical programmes, both within the University or at a national or international level. As a good practice mentioned in the self-evaluation report, pedagogical training and other trainings are included when calculating the annual workload, which further encourages academic staff to participate in such activities.

The learning environment is multilingual, supportive and fosters close interaction between the students and teachers, and the audit team would like to encourage the Department to continue lowering barriers of interaction. A recent institution-wide questionnaire indicated that the work atmosphere at the Department is amongst the best in the entire university.

Effectiveness of quality work

The strategic objectives of the Department are clear and well-aligned with the institution-wide strategic plan. The ambition of the Department to become the best computer science education provider in the Nordic region corresponds to the university-wide aspiration to become one of the top 50 universities in the world. In addition, the quality operations in use seem to be clear and fairly consistently used to align with the University prescribed procedures. As mentioned by a number of interviewees, some of the information systems (e.g. internet-based communications platforms) and structures supporting decision-making (e.g. entrance examinations) were introduced at the Department long before they were established elsewhere at the University.

Feedback systems at the Department provide a wide range of useful data related to both the planning of education and its implementation, and there is evidence of actions taken in response to feedback. However, it was difficult to see how these data sets together systematically evaluate the programme as a whole. Thus, the Department might benefit from further developing its quality practices to serve programme-level evaluation. In addition, what is less clear is how the feedback collected assists the Department to identify problematic areas and produce corrective actions. To enable better usage of the data, the Department might benefit from setting alarm signals, for example through RAPO, which would allow the management to react to problems in a timely manner.

6.2.2 Bachelor and Licentiate degrees in Veterinary Medicine

The quality management of the Bachelor's and Licentiate's degree education in Veterinary Medicine enhances the overall planning and implementation of the programme. The quality of its operations is strongly influenced by external evaluations. While the recommendations from these evaluations have been fairly systematically assessed and acted upon, the Faculty should be cautious with the use of the external evaluations as direct measures or promoters of its success. The degree programmes maintain a close connection with the world of work and the working life preparation works well. As a good practice, the implementation of the education includes a great deal of supervised practical clinical training, which is considered to be an essential element of learning at the Faculty. Teaching and assessment methods are increasingly diverse and varied. Multiple feedback systems are in use, however, the revision of the implementation of education is almost exclusively based on student feedback, which may be interpreted as too narrow a focus.

The quality management of the Bachelor's and Licentiate's degree education in Veterinary Medicine is at a **developing stage.**

Introduction

The Faculty of Veterinary Medicine is responsible for education in veterinary medicine at the University of Helsinki and mainly focuses on animal medicine and monitoring of food safety, thus, contributing both to the health and well-being of animals and people. As the only higher education unit that educates veterinary surgeons in Finland, the Faculty's admission is fiercely competitive and attracts a high number of applicants. In compliance with the Strategic Plan of the University of Helsinki, the Faculty strives to select the best and brightest applicants. However, currently there is strong gender imbalance as the majority of students are females. The total number of applicants in 2013 was 803, while the intake of students is below 10%. The degree programme in Veterinary Medicine comprises a three-year Bachelor of Veterinary Medicine and a three-year Licentiate of Veterinary Medicine. Students need to complete both degrees in order to attain professional qualifications.

Planning of education

The Academic Affairs Committee plays a key role in the overall development of the degree requirements and the design of curriculum. However, other bodies (e.g. divisions) also take part in curriculum workshops, making this process an inclusive and communal activity. Students are also actively involved in the planning of education and the quality of the curriculum is largely measured on the basis of student feedback systems, which may be interpreted as a too narrow focus. While external stakeholders and alumni are regularly invited to provide feedback on the competencies provided by the degrees, they do not take part in the planning phase of education.

The learning outcomes are clear, appropriate and in line with the overall objectives of the degree programmes. They are made available to each student before the beginning of each course, together with information about the grading policies, the methods of assessment, and the curriculum outline. The students that were interviewed by the audit team seemed to have clear understanding of what is expected of them at the end of each course. The faculty regularly updates the learning outcomes for each course in compliance with the EU Directive requirements, the Bologna Process, as well as the Faculty's own mission.

The degree programmes maintain a close connection with the world of work and the working life preparation works well especially in the Licentiate degree. The students interviewed by the audit team felt confident in finding a job placement immediately after graduation, although some of them take the advantage of acquiring practical work experience during the course of studies. For instance, during the summer and holiday season students may engage in inspections of different food products and thus receive extensive experience of the whole chain of food production from "farm to table".

The Faculty actively promotes research-based teaching and the academic staff incorporate their own research into the teaching where this is relevant to the curriculum. Students have numerous opportunities to participate in various research projects, often leading towards an internationally published paper. However, partly because of the practical orientation of the subject, the Bachelor's curriculum offers only a basic introduction to research. Often, students get involved in research work at an advanced stage of their studies, usually in the preparation of their thesis work.

The students interviewed appeared to have strong sense of belonging to the Faculty and reported being satisfied with their education and training. The relationship between students and academic staff seemed to be open and conductive to discussion and debate.

Implementation of education

The implementation of education includes a great deal of supervised practical clinical training. Such training usually takes place in small group settings and thus allows sufficient hands-on experience and feedback for all participants. The Veterinary Teaching Hospital which comprises the Small Animal Hospital, the Equine Hospital and the Production Animal Hospital, provide an excellent setting for such activities.

At the Faculty of Veterinary Medicine several styles of teaching and learning are in use. While lecturing remains a major component of the faculty's teaching methods, it is increasingly reinforced and supplemented by problem-based learning and self-directed learning. For instance, as stated in the self-evaluation report, in the portfolio course of the Bachelor of Veterinary Medicine degree, students are asked to reflect on their own learning and mirror their own competencies against the degree requirements. Practical training and laboratory work are also considered as essential elements of learning at the faculty.

Teaching methods are revised jointly during the annual curriculum workshops. However, teachers have a fair amount of freedom for the selection of teaching methods employed in their courses. As a good practice of raising awareness and increase the diversity of teaching methods used, the Faculty organises specific in-house teaching methods training which is coordinated by the senior lecturer in pedagogy. In addition, each year several members of academic staff participate in pedagogical courses arranged on institution-wide level.

For many years the Faculty has systematically used the institution-wide Teaching Evaluation Matrix to support the development of teaching. The Faculty´s Teaching Evaluation Committee evaluates teachers in recruitment situations using its own evaluation matrix. The matrix describes what kinds of skills the Faculty of Veterinary Medicine values and provides guidelines for developing as a teacher. Nevertheless, somewhat similar to the planning of education, the revision of the implementation of education seems to depend too much on student feedback.

Assessment methods at the Faculty of Veterinary Medicine are increasingly diverse and varied. While final written examination remains the most common assessment method in use, the faculty seeks to implement assignments that will encourage students to learn actively throughout the duration of the course, and not just ahead of examinations. For instance, in several of its courses, the faculty has introduced mid-course assignments that contribute to the final grade.

Alternative means of assessment, such as learning diaries and case reports are also used in some courses. Although such alternative methods of assessment have been well received among students, the limited number of staff largely restricts their use – particularly bearing in mind that some of these types of assessment are more time-consuming. In order to increase the use of alternative assessment methods, the faculty has selected the assessment of learning as one of the Faculty's development areas for the 2013-2016 strategic period.

Effectiveness of quality work

In the past two decades several external evaluations have taken place at the Faculty of Veterinary Medicine and they have had significant role in the quality assurance process. While the results of these evaluations highlight the commitment of the Faculty for continuous improvement of its operations, the overreliance on external evaluations carries the risk of them being equated with academic quality. In this respect, it is important that the Faculty resists the temptation to use quality evaluations as the most dominant or only criteria for measuring its success.

The Faculty's feedback system includes multiple and varied input sources, however, the revision of the implementation of education seems to depend almost entirely on student feedback according to the information provided in the self-evaluation report. While student feedback yields many valuable insights that are both necessary and desirable to reflect students' views, a more comprehensive outlook should be further enhanced as basis for development.

6.2.3 Licentiate and Doctor of Philosophy degrees at the Faculty of Arts

Many quality procedures for the Licentiate and Doctor of Philosophy Degrees have either been introduced recently or still exist as an initial proposal, and were therefore difficult to assess in terms of their effectiveness and actual implementation. However, there is already some evidence of well functioning quality procedures related to implementation of education and also evidence that the quality manangement is developing well on the whole. Nevertheless, more time will be needed to assess the long term impact of the changes taking place.

Quality management of the Licentiate and Doctor of Philosophy degrees at the Faculty of Arts is at an **emerging stage**.

Introduction

The University of Helsinki has recently engaged in a process of a major overhaul of its doctoral degree education. Starting from 2014, the University has re-organised its doctoral education in 4 doctoral schools based on the field of research that includes a total of 32 doctoral programmes. The Faculty of Arts is in charge of four doctoral programmes, which all belong to the Doctoral School in Humanities and Social Sciences. In addition, the Faculty of Arts participates in 6 other doctoral programmes headed by other faculties of the university.

Planning of education

The faculty involves all the relevant stakeholders in the planning of the new doctoral programme and strives for a holistic and flexible curriculum, which allows for personal tailoring. The curriculum includes professional (career) skills as a necessary and a relevant practice. The common principles for the supervision of post-graduate studies, the supervision plan and agreement, as well as well-defined learning outcomes, hold promising potential, and could make it possible to plan and follow the quality of doctoral and licentiate studies in the long run. However, at present, the faculty does not know how many of the students have established a supervision plan.

Follow-up on feedback has had an impact on the definition of the learning outcomes of the new doctoral programmes. The faculty has analysed the previous examiners' statements and made use of them in developing the learning outcomes related to doctoral dissertations. This suggests a systemic way to assure the quality of the end-result, based on critical stakeholder co-operation.

Many of the shortcomings of the previous programmes prior to the doctoral degree reform - diverse, fragmented practices, long study processes, lack of guidelines - have been recognized and lots of promising decisions have been made to develop new practices. As they are just being established it is not possible to demonstrate their impact.

Implementation of education

The quality assurance of the implementation phase starts early in the selection process and takes into account the previous feedback gathered. Selection criteria include the discipline-specific language skills required to complete the studies and the level of proficiency in Finnish, Swedish or English. They support the fulfilment of the University vision as an international research university. The criteria for enrolment also include the quality of the research plan. The number of research students that can be supervised by any individual supervisor is fixed. The chosen post-graduate students receive orientation which is jointly organised by the faculty and the doctoral schools. This guarantees equality and coherence across sectors. In the self-evaluation report the faculty has highlighted the distribution of work and co-operation as one area of development which demonstrates a critical attitude and awareness of the actual situation.

Research seminars are considered to be the most important form of teaching. They are organised according to discipline, in discipline groups or within the doctoral programme. Also courses in research skills and transferable skills (e.g. philosophy of science, language and communication skills) have been provided systematically. However, these courses have been optional for the students. The doctoral students require also good orientation skills as they are required to identify relevant courses for their particular needs. The students are advised to discuss the choice of courses with their supervisor(s) whose task is to evaluate the suitability of an individual course as part of the larger study modules.

The faculty offers pedagogical training for the research supervisors, and this has great potential. However, the training is not compulsory, it is only offered on a voluntary basis which means that the university cannot provide a comparable experience to all research students, as some staff may opt not to undergo training.

The dissertation examination process has been revised and made more effective as a result of follow up on feedback. There is evidence that time allowed for the examination processes has been reduced as a result. The faculty has not yet succeeded in shortening the total period of research study, nor have they succeeded in making the overall study process more effective.

The faculty used feedback gathered from formal external evaluations carried out in the past to develop new procedures and principles governing supervision. However, the feedback from post-graduate students is not collected in a consistent and systematic way and feedback processes are still in the process of development.

Effectiveness of quality work

The faculty of Arts received the highest overall score in the quality of doctoral education in the entire university during the academic year 2012. This was awarded following

an international evaluation. The audit team were impressed with this outcome, particularly in the knowledge of the challenges endured by the faculty to secure resources and funding for Arts doctoral students in the Arts which is compounded by the part-time nature of studies for most of the research students in this faculty.

The new programme structure and processes include promising tools to enhance the effectiveness of the quality work. One good example is the agreement process, which provides a functional structure for both the university and the student. The faculty strives to treat all the post-graduate students as equally as possible and puts effort into integrating the previous students into the newly developed quality assurance structures and processes of the new programmes.

6.2.4 Bachelor's and Master's degree education in Economics at the Faculty of Social Sciences

The quality management of the Bachelor's and Master's degree education at the Faculty of Social Sciences does not appear to be fully functional in terms of enhancing the planning and implementation of education. The lack of systematic monitoring of studies and the use of feedback seem to be the main challenges which require further attention. There is also evidence that the responsibility related to quality management could be distributed better and made more efficient. However, the creation of an encouraging work culture and atmosphere has contributed to a positive view of the conditions for study and work.

The quality management of the Bachelor's and Master's degree education in Economics at the Faculty of Social Sciences is at an **emerging** *stage.*

Introduction

The Discipline of Economics is part of the Department of Political and Economic Studies and one of the largest disciplines in the Faculty of Social Sciences at the University of Helsinki. Each year, the discipline enrols around 80 new students who study economics as their major subject. In addition, a significant number of students from other disciplines and faculties study economics as their minor subject. A long-term co-operative initiative between the Department of Economics at the Aalto University School of Business, the Discipline of Economics at the University of Helsinki, and the Hanken School of Economics offers an international Master's and PhD Degree Programme in Economics, administered by the Helsinki Center of Economic Research.

Planning of education

The overall planning of education at the Faculty of Social Sciences is coordinated mainly at the faculty level, with key responsibilities being distributed among several bodies, including the Academic Affairs Committee and the Faculty Council. Students

actively participate in the planning of education through their representation in key decision-making bodies, planning groups, as well as through course feedback. External stakeholders are not formally involved in the planning phase of education.

In the disciplines, the primary responsibility for the actual planning of education is in the hands of the discipline coordinators. In the current structure, according to the self-evaluation report, the economics discipline coordinator is responsible for a long list of items, including the preparation of the draft syllabus, preparation and submission of the proposed degree requirements, changes in the course provision, recruitment of hourly paid teachers, inclusion of traineeship in the degrees and management of teaching. While the role mainly involves coordination, the University may consider the extent of the responsibilities held by the discipline coordinator as this could improve his/her efficiency in the long run.

The curriculum, which consists of the degree requirements and the syllabus, is revised every three years, with minor amendments being made on an annual basis. The core curriculum is rather fixed, and the content of the compulsory courses remains relatively unchanged. In the planning phase for the degree requirements, internationally established standards appear to take precedence over local ideas and needs. Every teacher is expected to develop course content, bearing in mind the framework of learning outcomes.

Research and teaching at the department are linked mainly due to the fact that there is a responsibility for all researchers to teach, and for all teachers to conduct research. Lecturers are expected to use the research conducted at the Faculty as part of their teaching, and each academic year lecturers may offer a course based on their research profile and interest. In order to allow teachers to concentrate on research activities, as a good practice, the department annually offers all teachers a lecture-free period.

The Discipline of Economics maintains good, but mostly informal, ties with some of the major employers both in the private and public sectors. As part of the orientation process of students towards working life, the Bachelor's degree includes a three credit course on professional skills development, while students at the Master's degree level can obtain six credits after the completion of a discipline-related traineeship. However, the relevance of the degrees for professional life and the working prospects of graduates in the discipline are not systematically considered or followed. Thus, at present, there is very little reliable information that points out how well the degrees earned in the discipline correspond to working life. While graduate employment surveys cannot provide a complete picture, the department should further consider the importance of monitoring graduate careers as a natural part of their data collection process.

Implementation of education

Lecture-based teaching is the most widely used method of instruction. While there have been some recent attempts to introduce new methods of teaching (e.g. problem-based learning), a lack of variance in teaching methods is still present. According to

the self-evaluation report, student feedback has highlighted occasional dissatisfaction with the teaching methods in use. In order to reduce some of the weaknesses of the traditional teaching methods, the department should utilise teaching methods and techniques which will engage and mobilize students in active learning, with lecturers increasingly becoming facilitators of the student learning process, rather than simply being information providers. This transforming interaction between lecturers and students will cultivate an even more enriching and open atmosphere for teaching and learning.

The assessment of learning is mainly done through mid-term and final examinations. Constructive alignment is used as an underpinning concept to ensure that the assessment methods are in line with the intended learning outcomes. While the movement towards constructive alignment has certainly encouraged the clarity of learning outcomes and has strengthened the links between learning and assessment, a full transition towards constructive alignment will be difficult to achieve, bearing in mind that the present system of planning of education does not allow or favour frequent modifications in the course design.

Workplace well-being is based on cooperation between the management and the employees, and is monitored as part of the institution-wide work satisfaction survey. When teaching duties are distributed, account is taken of changing circumstances and personnel turnover. Lecturers increasingly participate in pedagogical education, however, the local impact of such training is not clearly visible from the documents available to the audit team. The creation of an encouraging work culture and atmosphere has contributed to a positive view of the conditions for study and work shared by both students and staff.

Effectiveness of quality work

Student feedback is collected electronically for all courses, however, the return rate of student feedback is often too low, which makes the evaluation and revision of courses challenging. Hence, future attempts should focus on increasing the response rates for student feedback by introducing more receptive feedback mechanisms that should emerge from close cooperation with the students – a necessary step to enhancing quality culture and impact. An associated challenge is the insufficient utilization of feedback and the slow closure of the feedback cycle. In order to increase the student feedback participation rates, the discipline should pay close attention to putting the results of the feedback into use, while assuring that students have a clear idea how and in what ways their feedback has had an effect.

Another challenge which remains to be addressed is that many students choose to drop-out, while those who eventually complete their degrees do not usually graduate on time. During the interviews, both non-completion and late completion were explained as resulting from a situation where a significant number of the students enrolled in the discipline, also to pursue a degree elsewhere (and often as a first

choice), which has decreased the commitment of students to the economics studies. According to the SER, the discipline is currently introducing steps to improve these circumstances, mainly by revision of the selection criteria. While this is an important step that the audit team commends, the strategy for dropout prevention should also include close monitoring of student progression during their studies and addressing learning difficulties of students by providing personal support as a way to help retain more students. Finally, although low completion rates and extensive time to a degree can, in some circumstances, reflect inefficiency, it should be noted here that some of the causes for such developments cannot be linked to the discipline alone, but should be seen from a wider perspective, taking into account the specificities of the Finnish labour market and the characteristics of the Finnish higher education system.

6.3 Research, development and innovation activities

The Strategic Plan of the University of Helsinki defines the strategic objectives and development areas which guide the research, development and innovation activities. Research is conducted in faculties, departments and research stations as well as in independent institutes. The University profiles itself as a multi-disciplinary, world-class, research-intensive university that recognises its responsibility to society. The University's strategic objective of being among the 50 leading universities in the world is a challenging objective. However, the development areas and measures defined seem to support this objective well. Based on the Strategic Plan, the Central Administration, faculties and independent institutes annually update their target programmes and action plans, where the changes in the operating environment during the period of the strategic plan is taken into account. The University has defined key measures to be taken, including responsibilities and resources for each development area. The measures are followed up and reported in the Annual Review, 2013. Although the indicators support follow–up in an appropriate manner there is a need for further development work on these indicators.

Research conducted at the University of Helsinki ranks among the best in the world in a couple of fields. The University regularly evaluates the quality of its research and doctoral education in the form of international peer reviews. The general impression conveyed by the assessment panels for the latest assessment carried out (2010 – 2012) was that the performance of the University of Helsinki is outstanding or excellent. Furthermore, the University participates in various national and international research assessments which are benchmarked between different research organisations. Based on the self-evaluation report and interviews with staff there is evidence that the feedback from various assessments is systematically used in the University to develop its operations.

The main strategic objectives of the research are well known among the staff and students and commitment to them seems to be high. The staff are actively involved in developing research activities and services. The University of Helsinki involves its stakeholders in different forums which develop the University's operations. The University regularly organises formal events and several informal events on different levels for its stakeholders in order

to gather their contributions towards the development of the University. One example of this is the strategy process: A total of 2,500 respondents, including representatives of staff, students and stakeholders completed online surveys which were conducted twice during the process. There are two examples of where stakeholders contributed at different levels within the university. At the departmental level students were involved in the development work to implement action plans. The Board of the university arranges evening sessions at the faculties four times a year to get a sense of the quality.

Quality management of research activities is at an **advanced stage**.

Management of research

The research activities of the University of Helsinki are under the responsibility of the Rector, the Vice-Rector in charge of research, the faculties, the departments and independent institutes, and Research Affairs in Central Administration. All units have their own staff responsible for the unit's research activities. The leaders of the research groups and individual researchers are responsible for the quality of their own research. The challenge is to find the right balance between the University level instructions and freedom of the units. When the division of responsibilities is relatively clear, a danger exists that it is regarded as too formal and rigid. The division of research responsibilities seems to be logical and appropriate for the present needs of a multidisciplinary University. However, continuous development in finding the right balance will be required to meet the ever increasing challenges and competition in the global research community. If the approach of the University, in response to meeting the future research challenges, were to focus on a more efficient exploitation of the interdisciplinary opportunities at the University, then this would require the allocation of additional senior responsibilities set above the level of the faculty and department.

The University has many processes which help to produce excellence in research. Research is a very competitive area and the leadership is convinced that effective quality management is an asset for the University of Helsinki in the context of tough competition. The University is placing a special focus on maintaining a high standard of project management, particularly in externally-funded research projects. The audit team recommend that the University extend this special focus to include internally funded projects as they can often have a more strategic nature and should be managed to the same extent as the funded projects.

Scientific expert bodies in directing research

The University of Helsinki has an *International Advisory Board* and several scientific advisory boards at faculty, department and independent institute level. Their tasks are to support the research strategy and policy issues, research profile and the evaluation of the quality of research.

The *University of Helsinki Research Council* considers matters on University-wide research related topics; the *Research Infrastructure committee* prepares the guidelines on the University of Helsinki research infrastructure policy and prioritizes centrally managed research infrastructure funding.

The strategic objectives of research, development and innovation activities

The vision 2020 – "Excellence for Society" is a well embedded expression of the intent of the University to be among the leading multidisciplinary research-intensive universities in the world. It also indicates the intent to actively exploit the research results for the benefit of society.

The goal of ensuring that everyone in the University community is committed to reaching the strategic objectives is of utmost importance. The strategic objective of being among the top 50 universities in the world seems to be accepted and supported by the University community. The development areas indicated to support the attainment of this objective are:

- to allow sufficient time for research,
- to continue the profiling of research
- to allocate resources to both recognised spearhead projects and new initiatives.

The defined development areas for the strategic objective of being a responsible force are to offer research results for the benefit of society and make increased use of research-driven innovations. The adoption of this strategic objective seems to be well accepted throughout the University community but the real understanding of all its dimensions is still evolving.

The University has recently defined ten focus areas for research and education. However, the existing list of areas does not have a significant role in steering the research of the University. The University has recently started preparing a new, shorter list of focus areas. The process of developing the new focus areas seems to be appropriate with the Vice-Rector leading the process and all relevant contributors included. The audit team considers that the new focus areas will facilitate quality management of the University by providing a common basis for steering the multidisciplinary agenda within the University. This is important due to the fact that there are many organisational layers and it will facilitate the introduction of more transparent criteria for resource allocations. It will also support improved decision making for research infrastructure allocation decisions which will complement the university's principles for developing research infrastructures. In addition to national research infrastructures, the university has a key role in European research infrastructures which require considerable financial investment and consequently prioritisation. Furthermore, there is strong national pressure for Finnish universities to profile themselves by their areas of core strength.

Research indicators as a measure of success

The Ministry for Education and Culture issue a common set of indicators for follow-up by all Universities. Other indicators are selected by the University. The University has selected several indicators to follow-up on the achievement of the strategic objectives of research. Publishing in high-quality publication forums and success in external research funding are efficient indicators of the quality of research. Also, the number of academy research fellows and professors and the time spent on earning a doctorate are relevant indicators and followed by the reporting systems. These indicators are used on the University, faculty, department and independent institute level to measure the quality and success of the research. They also partly indicate how the target programmes and development activities have succeeded. The comprehensive state of research is investigated annually and reported in annual reports. The University follows the realisation of the target programmes and action plans through annual and biannual reporting. The leadership at the various levels of the University receive follow-up reports on an ongoing basis on the research indicators produced by the reporting tool (RAPO). The monitoring covers both University and faculty levels and there are plans to extend the monitoring to the departmental level by the end of 2014.

However, the self-evaluation report indicates that the existing reporting system does not provide follow-up data in a manner that would satisfactorily benefit the users of the data. Consequently the TOIVO operations management system which is supplemented by the RAPO reporting system are both under continuous development. Although the TUHAT database is probably the most important tool for the purposes of research management, the audit team recommends that the special requirements of the University research management are prioritised in the development activities of the TOIVO and RAPO systems.

According to the recently published report *"The State of Scientific Research in Finland 2014"*, the bibliometric results show that international co-operation in research significantly increases the impact of science: they are cited more often and this in turn increases the visibility of the organisation. The evaluation report of the research and doctoral education for 2012 confirms this. Joint publishing has been monitored since 2011 for national and international publications and national level and joint international publication is one of the follow-up items of the University Strategic Plan. On a university level the share of joint publications is steadily increasing but in some faculties the share is very modest which indicates the low level of international cooperation. It is recommended that mechanisms to promote international cooperation, particularly in those disciplines where the current level of co-operation is at a low level, are put into effect. No significant changes have taken place in joint publishing within the University in the period 2010 to 2013. The average share of joint publications within the University, of all peer-reviewed publications, was 15%. This indicates quite a modest level of interdisciplinary co-operation between faculties and disciplines.

The leadership at university and faculty level mentioned the most important criteria for measuring follow-up on the success of the University research are: the volume of publications; the quality of publication channels used to publish; information in the TUHAT research database; citation index, volume of ERC grants and other external international and Finnish funding indicators. However, the audit team noticed that indicators on research impacts are absent including qualitative indicators on impact. There are cross university co-operative efforts in place to find relevant indicators on the impact of research. This is due to the fact that these indicators are not established in the other Finnish universities. Moreover, the current indicators are mainly retrospective. The audit team recommends that the University consider the development of indicators relating specifically to the impact of research. Although it is difficult to develop new proactive indicators of this nature, they would provide a better focus and point of reference for where the university sees its future success in research and a measure of any progress in achieving this. The new indicators could also serve as part of an early warning system.

Research assessment and evaluations

Research in different disciplines complies with certain procedures associated with that discipline, which are also part of the embedded quality management. Quality evaluation is considered to be a built-in feature in research, for example, peer review as part of the process of publishing and the filling of research positions. The interviews with staff in the University revealed that competition in funding was seen as a quality factor as it increases the quality of the applications. However, if the competition is between the University's own departments, there is a risk of undermining collaboration.

Comprehensive University-level research assessments are carried out regularly at the University of Helsinki. The evaluation of research and doctoral training has been carried out in 1999, 2005 and in 2010–2012 in the form of international peer reviews. The evaluation of research and doctoral training (2010 – 2012) was based on a new model and was an innovative endeavour to interpret the diversity of the research of a multidisciplinary university. The evaluation was targeted at *researcher communities* which were formed on the basis of collaboration in research and doctoral training. Evaluation of the output and impact of the University using a bibliometric analysis showed that the University of Helsinki performs very well overall. The normalized impact (MNCS) is more than 50% above the world average and even increases up to a level of 1.6. The general impression of the panels involved was that the performance of the University of Helsinki is outstanding or excellent. The results also reveal the expected large differences between disciplines but also between areas within a discipline. Furthermore, the evaluation recommends that the University needs to reinforce interdisciplinary collaboration.

The University participates in various national and international research assessments which are benchmarks between different research organisations. Helsinki University participates in important international benchmarking regularly done between LERU

(League of European Research Universities) members. The University of Helsinki also conducts internal evaluations at regular intervals. However, the academic community prefers the University to make increased use of external evaluations. This is a very relevant proposition because the suggestions made by external evaluations are usually taken more seriously.

The assessments of research use bibliometric analyses as a corner stone. In addition to international statistics and bibliometric tools, the University's own research database - TUHAT is very important. The University has agreed on a separate revision process for publications with the University Library, which will add to the reliability of the data.

The documentation submitted to the audit team and interviews held with staff indicate that the use of feedback from various research assessments and evaluations is systematic. On a general level, the results of the assessments and evaluations are taken into account in the negotiations with the Rector and they have a significant influence on the outcome. The research team leader has responsibility for the Academy of Finland evaluation feedback. The team leader uses the evaluation feedback typically in evaluation follow-up meetings. Higher success rates in external funding applications is one consequence of utilising external evaluation feedback as part of the new system. Research teams go through all applications and also their feedback to raise the level of quality of the applications and consequently achieve higher success rates. The selection of which funds to apply for is being considered more carefully. An extreme consequence of research evaluations is that bad evaluation results can stop research teams. However the application process is extremely resource intensive and becoming more competitive.

Research Support Services

The last audit revealed that more cooperation between faculties and research services would be required. This was selected as one development area. The production approach has been changed to a more user-centred approach. It seems that several measures have been taken to develop the services. The research services are a combination of many services and it was mentioned in the interview with staff that recent developments have added to the efficiency of research processes and saved time. One very concrete example is improved reporting to researchers to help them in budgeting for their research projects.

Research Affairs oversee the Research Administration Unit as well as Research Services. Research Affairs is needed to coordinate research-related administrative processes at the University level to ensure high-quality operations and streamlined processes across the whole university. The University overhauled its research service organisation and redefined related duties in 2013. The audit team considers that this reform is on the right track towards providing better support for top-quality operations and researchers amid increasing competition. However, in 2014 it is too early to assess the impact of the reform on the quality of research, development and innovation activities.

The intra website, Flamma, is a very useful tool for researchers. The use of the operations manuals in Flamma enhances the use of common recommended research procedures throughout the University and thus improves the quality of research and enhances transparency. Documentation in Flamma is being added on an ongoing basis. The process of developing Flamma prioritised the needs of the user. Flamma is also an effective tool for enabling strategic research guidelines and new procedures for research activities to penetrate all the levels of the university.

Research funding services: The centralisation of services provides opportunities to build competence. However, it is important that the services are easily accessible to staff in the different parts of the organisation and that their needs are catered for.

Capacity building in Exploitation and Research Funding: The systematic approach taken and process in place to assist in applications for strategically important research funding generates greater societal impact and is vitally important for the University. The support service arranged for this is absolutely needed. As a result, the full use of this kind of service should lead to increased success in gaining external funding. The service is in an early development phase.

Legal services and Business Collaboration: In addition to tailored self-service tools, legal support is also provided for team and individual researchers. This diminishes the risks involved in contracts with other parties.

Research services also include special training that supports top-level research such as drafting ERC and FiDiPro applications and applying for the Academy of Finland Centre of Excellence funding. The training probably increases the success rate of applications and decreases the application drafting costs per funding received.

The internal services team has an internal customer feedback system in place. The staff members interviewed by the audit team were able to give good examples of what kind of corrective measures were taken as a result of the customer feedback.

Responsible conduct in research

The University of Helsinki strictly adheres to the guidelines on *'Good scientific practice and procedures for handling misconduct and fraud in science',* drawn up by the National Advisory Board on Research Ethics (TENK). The University promotes research, education, and the dissemination of information concerning the ethics of science. There are several committees dedicated to ethics for the different disciplines. The interviews with the students and scientists indicated that they receive training in ethical questions related to research.

Interdisciplinarity in research

The audit team recognises the significant potential for the University to develop and intensify activity across the various disciplines as a multidisciplinary institution.

However, the audit team are of the opinion that the University is not availing to the full use of this potential. The benefits of an interdisciplinary approach in research, and also in degree programmes are not fully realised. The need for interdisciplinary approach was mentioned in several interviews during the site visit. The research activities between faculties and departments seem to be more ad hoc than systematic. The University should consider the development of mechanisms to systematically encourage emerging research projects which promote interdisciplinary research. This would also generate benefits for degree education. There are some good examples of interdisciplinary activities in the University of Helsinki at present, for example, the Open University; the forum for different experts; a meeting place for different experts and Centres of Excellence (CoE).

6.4 Societal impact and regional development work

The Strategic Plan of the University places a strong emphasis on societal impact, regional development and on sustainable development and resolving global challenges. One of the strategic objectives is to be a responsible social force providing "Excellence for the Society". The development areas established to facilitate implementation of this objective are: Research results and expertise for the benefit of the society; an inclusive community – from interaction to solutions; and the importance of external partners to be included in the University's sphere of influence.

The core duties carried out by the University in research and teaching and learning impact society and the regional objectives. Evidence of this impact occurs when scientific research produces new innovations stemming from basic research. Graduates of the University enhance the competitiveness of society with their expertise. The continuous dissemination of scientific information to the public contributes to Finnish society. Furthermore, the flow of scientific information is supported by a number of wide-ranging partnership activities.

The University community, from the students and staff to the external stakeholders, are actively involved in developing ways to increase the societal impact of the University. However, a more profound understanding of the meaning of societal impacts is required. The University conducts several surveys to follow-up on the progress of the strategic development areas relating to the objective of being a responsible social force. The current indicators in this area are relevant but not sufficient.

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

Indicators for societal impact

Societal impact work is carried out in faculties according to their different profiles. Joint goal setting, planning of activities and sharing best practices is carried out in regular meetings between the vice-deans and the Vice-Rector responsible for societal impact.

The current indicators for following up on the strategic objective of being a responsible social force appear to be relevant but are not sufficient. There are no indicators on the societal impact of research. Quantitative and qualitative indicators are required. The mechanism for establishing indicators for societal impact from education and research are highly complex and difficult to articulate. The audit team recommends the University consider establishing qualitative surveys to complement the quantitative indicators. Regular surveys with a particular focus on how the University is impacting societal issues in a number of selected areas should be introduced. For example, the impact of the University's education and research on the Finnish food safety.

The self-evaluation report mentions that a great deal of raw data on societal impact and regional development is available from different University systems and stakeholders. The usability of such information is very low. Therefore a systematic analysis of data and its presentation in a meaningful way would provide a valuable tool to increase the understanding of the societal impact of the University of Helsinki and how to increase that impact.

Research results and expertise for the benefit of the society

Most of the research areas of the University of Helsinki are universal and consequently the societal impact reaches global dimensions. Research conducted at the University of Helsinki ranks among the best in the world in a couple of fields. Through top research projects, the University participates in solving global challenges and contributes to global impacts which in turn enhances the international role of Finland.

In a number of fields, such as environmental research, food safety, or foreign policy, the university's research has also immediate regional and national relevance. Its researchers and units maintain close contacts with societal and political decision-making bodies.

The Strategic Plan states that special attention will be paid to innovation management. The Annual Review Report, 2013 and the self-evaluation report indicate that the University of Helsinki actively strives to improve the use of research results. The University has recently established a new committee on innovation and business activities. After the reorganisation of the Helsinki Innovation Services (HIS) Ltd the amount of external funding available to prepare research results for commercialisation has grown remarkably. The University protects IPR only to the extent that the inventions can be commercialised. Currently the number of patent applications is very low, but the University of Helsinki has set a goal to increase the number of patent applications which is required to support the increased use of research results.

The self-evaluation report mentions that an innovation strategy is required to determine the objectives and indicators for innovation activities. The audit team agrees with the requirements identified for the innovation strategy connected to the commercialisation principles including models for proof-of-concepts and spin-off companies. Indicators for follow-up on the innovation activities should include the

number of invention disclosures and patent applications. It is of vital importance that the exploitation of research results is considered when planning the project and applying for funding. A new unit (the Capacity Building in Exploitation and Research Funding) has recently been launched to assist the researchers in planning projects with stronger societal impacts. The audit team considers this to be a very good example of developing operations to achieve the strategic objectives. It is recommended in the self-evaluation report that a revision of principles used for allocating funds to research and education, to enable the generation of more societal impact, is required. The audit team agrees that this is an efficient way to implement the strategy.

In 2013, the University of Helsinki began preparing its position on open source and open access policies. The audit team considers this to be an important measure to ensure that the University's research resources are more available for society.

Degree education and society

The societal impact of degree education is highlighted in the metropolitan area but covers the whole of Finland. The proportion of experts educated by the University is very high among all the Universities in Finland: 27% of the third-degree cycles and 17 % of the second cycle degrees. In addition to its regular degree education, the University reaches out to the wider society by running an Open University as part of its educational structure.

The University of Helsinki uses several tools to prepare students for employment such as the Helsinki Think Company, career orientation courses, traineeships, and mentoring programmes. The audit team sees these as very useful ways to familiarise students with current working life needs. Some faculties have panels with external members, where discussions on the future working life are held.

The University of Helsinki Career Services monitors the employment of all graduates. The ratio of gainfully employed graduates to all graduates is followed up as one indicator of the strategic objective of being a responsible social force. In addition, faculties and departments carry out employment surveys. The surveys examine the graduates' employment situation and the nature of employment. They explore their career development and satisfaction with the degree which they have completed. The surveys produce information for the career guidance of students, the development of teaching and the marketing of degree programmes. They also serve as a form of employer feedback by providing information about the experiences of the respondents. The interviews with staff revealed that this information is used in planning the syllabus for degree programmes.

Foreseeing the future needs of society

In addition to the present needs, the University monitors the future needs related to education and research in society. However, the interviews indicate that the practices vary considerably between the different parts of the organisation and in some cases

seem to be quite vague. The use of systematic tools to predict the future needs of society is rare. The audit team understand that the information from feedback and discussions with the employers is used in planning for degree programmes but this only provides information on the present needs and not so much for future needs. The audit team recommend that common processes for making forecasts, in cooperation with stakeholders, should be developed and these should be used in planning for degree education.

The external stakeholders met by the audit team indicated that the job market is changing rapidly and requires a faster more dynamic response from the academic world. They also mentioned the future requirements for more specialists with broader experience. However, it seems that encouraging students to take studies in other departments or faculties is not a common practice in the University. Therefore the audit team strongly recommends the development of mechanisms to break down barriers between departments and faculties to enable planning for the education of experts with a wider set of synergistic competences from across the different disciplines. Communication skills were heavily emphasised by the stakeholders as being necessary for the future needs of working life.

Management of community relations

Community relations and regional development are managed by the Rector. The Chancellor also participates in management and implementation. The Communications and Community Relations Committee (strategic coordination group) is a multidisciplinary and far-sighted committee where half of the members come from the University of Helsinki and half are from outside the University including members from the public sector, media and the business world. At faculty level, community relations networks complement the University level committees. The composition of University level committees represents the main stakeholders. The interviews with major stakeholders indicated that they considered the platforms for engagement to be sufficient and that their contribution is considered by the University management. One stakeholder mentioned that they find the biannual meeting between their top management and Rectors to be a very valuable platform for engagement.

Strong partnerships and alumni activities

The newly developed partnership model which refers to the division of responsibilities between the University and third parties and criteria for evaluating partnerships is a very useful and necessary development and important for the quality assurance and management of all partnership activities. The model strongly promotes the implementation of the University's strategic goals. During interviews there was evidence to suggest that the top leadership of the University has adopted the role of advancing partnerships. However, the role of the Board in this regard remained unclear to the audit team and this should be clarified. The audit team recommends that after a couple of years an evaluation of the benefits of partnership activities should be carried out.

The exploitation of the alumni network has increased significantly in recent years. Some of the events in 2013 have allowed the alumni to become actively involved rather than just being an audience. Contacts with alumni have also increasingly extended beyond the University to include various trade fairs. There are plans to launch new alumni services in 2014. The number of registered alumni has steadily increased being almost 20 000 in 2013.

Reputation and image surveys are carried out at the beginning and end of strategy periods and annual follow-ups are conducted for selected development areas. The university conducts alumni surveys on different themes. The stakeholders evaluated the University's success in its operations in 2013.

The building of international alliances and partnerships is continuously growing and this will enable the University to increase its impact globally and also to bring benefits to Finnish society. The development of the international recognition of the University of Helsinki has been surveyed.

Visibility of the University to society

Visibility is an important tool to facilitate generating societal impacts. The University of Helsinki has a prominent media presence. In 2013, the University of Helsinki was mentioned in Finnish-language media an average of 900 times per month. Helsinki Think Company is a newly launched forum for University students and researchers interested in entrepreneurship. Alumni activities and Studia Generalia lectures provide a good basis from which to increase the visibility of the University. Additionally, the University has several ways to increase its visibility among society in general. This includes the Open University, the University Library and the Palmenia Centre for Continuing Education. The Finnish Museum of Natural History has a wide range of activities targeted at different groups for the citizens of Helsinki and all of Finland. It is important that these independent institutes have established their specific sets of indicators to measure even the indirect impact on society, including, for example, the number of visitors to museums.

Mechanisms of societal impact

The interviews with staff indicated that although the vision of the University of Helsinki – "Excellence to Society" and the strategic objective of being a responsible social force is widely accepted, the University community still requires a more shared and deeper understanding of the mechanisms of societal impact. It could be said that this understanding is developing, however it varies considerably across the organisation.

This requires a change of mind-set of every member in the University community. It seems that the progress is encouraging – and many students comprehend the potential societal impact of their studies and their future contribution to working life.

7
Quality management of staff recruitment for an international university

The University of Helsinki aims to position itself among the top 50 universities in the world. Extra emphasis on the academic recruitment process, in particular the recruitment of more international and internationally experienced candidates at the level of professor and research director, is seen as a crucial factor to this end. In this context monitoring tools can be very useful. So far comprehensive analytical data is not available for the quality management of international recruitment. The recently established electronic recruitment data system will probably remediate this. However, recruitment alone is not enough. A sustained development towards becoming a truly international university requires the broad commitment of all ("locals" included), a visible presence of foreign colleagues at all levels and in all types of functions, and an overall campus culture of worldwide perspectives and co-operation in teaching and learning as well as in research.

The quality management for international recruitment is currently at **an emerging stage.**

The University of Helsinki considers its reputation as a top research institution of international renown to be its most important strength. The objective of recruitment is to find the best applicants for all positions from both Finland and abroad. At the end of 2013 the share of international employees was 15% at the third level and 8% at the fourth level. The focus on internationality was already prominent among the recommendations in the previous audit in 2008 and international identity and visibility are placed at a high level in the current strategic plan. These goals are supported at all organisational levels in the University.

The University of Helsinki points to the careful application process for international staff and has several quality management procedures in place. The regulations of the University specify the decision-making and applied procedures related to staff recruitment. The University has also prepared a Recruitment Guide for the units.

Since 2010 the University of Helsinki has a tenure track system in place for young scientists. The principle in recruitment is that all advertisements and announcements are made in English and published on websites. Furthermore, head-hunting is possible. Special attention has been given to the role of communications in order to maintain the interest of the applicants and to create a positive employer image. In order to advance recruitment in the faculties, they are instructed to establish search committees to support the recruitment processes. One method in international recruitment is the system of visiting professorships that facilitates a 'get-to-know-you' approach.

International recruitment is defined as a matter of identifying very good candidates (building and using networks), attracting them (be a magnet), obtaining them (provisions) and keeping them (future prospects). The strategy for international recruitment is seen as a contribution to quality improvement in relation to 'the changing world' and parallel to a trend in the Helsinki area job market towards stronger internationalisation. For example, advantages include the introduction of new ideas, new ways of working and more competition for the University and between candidates.

Students come to the University of Helsinki because they consider it to be the top university in Finland. The University wants a similar level of attraction for international staff. The main tool chosen by the University to expand international recruitment is a more flexible and attractive selection process (tailor-made offers, welcome packages to pay for postdoc, tenure track for the juniors). Since 2010, 40 international staff applications have been placed in various departments throughout the University. There are also fields and cases where international recruitment is reportedly crucial because there are not enough Finnish candidates available (e.g. Dentistry and Veterinary Medicine).

According to the self-evaluation report, the University has planned a series of actions to further improve on its ability to recruit international staff. These actions include for example raising leaders' awareness of recruitment as one of their most essential duties, shortening the recruitment process, enhancing its quality, making better use of available contacts and information and expanding the tenure track system.

The audit team found a lot of evidence on different procedures to assure and develop the quality of recruitment. However there is no comprehensive source of information on international recruitment to date including an analysis of successes and failures and lessons learned. For this reason the new strategy is not based upon past performance in any systematic manner. The audit team was unable to find out which targets, in terms of percentages and timeframes, by discipline and category, if any, are being used by the University. Some pockets of good practice examples were reported to the audit team by the Institute of Biotechnology and by the Department of Computer Science at the Faculty of Science.

Support services for recruitment are offered by the Human Resources and Legal affairs sector and also by the Communication unit. Communications in English is mentioned in the self-evaluation report as an area in need of development. The audit team also

observed the need for development in this area. There is a mixed approach towards the implementation of the language policy in the University. For example, many documents are in English including many parts of Flamma, many Master's degree programmes are delivered in English and Doctoral education is provided/supported partly in English. However English is not a campus language or a language used by the administration of the University. In professional fields the language of clients and partners is also a barrier (for example, in Law, Veterinary Medicine and Human Medicine). However in the international Teacher Education orientation English is seen as crucial.

The audit team invites the University to consider the following recommendations to assist in the further development of the quality assurance arrangements underpinning the international staff recruitment strategy:

Recruitment of international staff: The audit team recommends the promotion of a more open and flexible recruitment practice to assist the University in becoming more attractive to candidates on the international 'market'. This includes academics from other countries in addition to internationally experienced Finnish nationals. This latter point may require a minor but important rephrasing of the strategic goal. In implementing the international strategy the University should perhaps differentiate between attracting doctoral students and post-doctoral students. The University should also differentiate between junior faculty and senior faculty positions (as they each require a specific approach). Focussed recruitment is also another option. For example it would be recommended to initiate spearheaded group recruitment to create impact (similar to what is happening at present in Dentistry). The University could also consider identifying and offering to host (potential) ERC grantees.

The international University profile: Recruitment cannot be promoted as an isolated activity. The University should strive to create and enhance a university atmosphere that is truly welcoming, where international colleagues are clearly visible, for example in leadership positions, and seen to be contributing to the University at a level above and beyond their own department. The University could stimulate activities to ensure that the "locals" actively develop their international attitude and skills in teaching and research.

Curriculum development: Promote the creation of curricula that truly reflect an international dimension by reflecting world challenges and megatrends. The University wants to be an international university so it is important that this desire is apparent everywhere.

Communications: The University should consider the potential negative impact of communications which place an emphasis on the rough climatic conditions of Finland (as if survival in Chicago and Montreal is any easier). In general it is a good approach to create a more positive narrative or 'tell a good story'. The University is perhaps too modest in its current approach.

Support facilities and arrangements: The university could consider a more structured approach towards support and infrastructure that impact upon the decision to move to another country or relocate. This could include for example working on better employment opportunities for spouses.

Graduate students: As to international graduate students: offer them internationally competitive programmes and allow them more time to find a job in Finland after graduation – it's now only 6 months.

Research and analysis: The University should carry out more analytical work on the development of international recruitment to date, including the tracking of the career paths of past and present international members of the University community. An analysis of factors encountered to date in terms of failures and successes in the recruitment of senior academics from abroad is crucial for any future success. It is also essential that the University understand the views of international staff currently working at the University in terms of what they value or dislike about the University and living in the area. There are a number of international advisory boards in place throughout the University. There may be some potential in bringing them together to focus on other known successful approaches.

8
The quality system as a whole

The University of Helsinki has defined the quality system as a "framework of operations development". It is a functioning, stable and information based system. There are clearly defined responsibilities and dedicated tools. The quality system of the University of Helsinki covers essential parts of the university's basic duties. The working of operations is described in the operations manual which is available in the Flamma intranet.

Information production and the various follow-up operations enable the responsible unit leaders to adapt their operational approach, as well as providing for the information needs of the university's leadership. There is evidence that the quality management system also has an impact on the development of operations. However, given the well-developed quality culture at the University, the impact could be stronger, which means that there is still is room for improvement.

The quality system as a whole at the University of Helsinki is at a **developing** *stage.*

8.1 The effectiveness of the quality system

The University of Helsinki has a clear strategy and well defined objectives. Strategic goals are broken down into specific measures, including responsibilities and resources. The ownership of strategic goals and the commitment to quality is apparent at all levels, although the relative autonomy of the University's units is a challenge for the streamlining of goals and actions relating to quality management.

The University of Helsinki`s quality management system is an established and functioning system. It has been developed based on the areas in need of development since 1990's. In practice the quality system of the University of Helsinki is a framework of operations development, although the audit process showed up that in many ways it is more conceptual than it is tangible and visible. Also the interviews during the audit visit indicated that the University staff would need more knowledge of the quality management system tools and formats. It was also difficult for the audit team to judge to which extent the objectives for the quality system fulfil the goal "to aid the

academic community in developing a framework for quality management". In order to increase the effectiveness of the quality system at all organisational levels, the audit team would recommend the University to develop quality system more visible to all internal and external stakeholders. This would help all parties, in particular the academic staff, to understand their role in the quality system and to utilise the system as a tool for development of research and degree education activities.

The quality system of the University of Helsinki is designed to be an intrinsic part of the management and organisation structure. The close linkage between the quality system and operations management and the evidence on the usability of the information produced by the system convinced the audit team, that the quality system is fit-for-purpose. The quality system includes various feedback mechanisms that produce information for the future development of operations. The management information system and the various reporting tools provide a stable information system. However, further development is required to ensure that the information system is capable of providing a dynamic integrated analysis to support the future strategic plans of the University. Whether or not the quality system is flexible enough to manage risks and opportunities in the future, in an adequate manner, is a question that still remains to be answered.

Since the last audit in 2008, the quality system has undergone a lot of changes. Quality management and information monitoring tools have been improved and some new tools were installed. The establishment of Flamma, the operations data library is a central document of the University's quality system. It is an excellent source of information for both staff and students. Flamma provides also future potential for the harmonisation of the quality procedures in the University and for sharing and embedding good practices within the University community. In addition to develop the Flamma as a system for information provision the audit team recommends the University to develop Flamma as a dynamic quality support system.

The audit team invites the University to consider developing further the procedures for evaluating and developing the quality system. Especially the University would benefit from developing the mechanisms for identification of the strengths of the quality system and areas in need of further development. The quality system should be critically analysed also in terms of its effectiveness, particularly with regard to the measures taken following the reporting and feedback on the system's effectiveness in general. The audit team recommends the evaluation of the indicators used to monitor operations. It suggests defining indicators reflecting the measures outlined for the strategic objectives, for example societal impact. In addition the quality indicators should be more related to operations and enhancement.

8.2 Comprehensiveness of the quality system

The quality system of the University of Helsinki covers the main parts of the activities of the University. The University has well developed quality management procedures for the research, teaching and studies, societal interaction, administration and support

services. The information production tools produces data that has impact on the management and development of operations. There is a great deal of good practices in all of the operations considered. The involvement of the students in teaching issues and the effectiveness of the student feedback system are two examples. Also the regular evaluation by peer reviews of research and doctoral education, as well as national and international research assessments, including the systematic exploitation of feedback, can be cited as good examples for other universities.

The high commitment to excellence and the high quality is, in some places, still lacking coherent and transparent ways of working. The audit team received evidence of well organised units with a strong willingness to maintain and improve a high level of research and teaching. However, in order to maintain the high standard of activities, the audit team recommends that the senior executive of the University pay more attention to effective means of linking the research and education activities with each other for the benefit of both.

The audit team saw a tendency towards insularity at the University. Knowledge about other units seems to be in some cases limited, which can reduce the opportunity to benefit from harmonized approaches to research and education. As a key structural development target the audit team identified the need for harmonisation of the quality management procedures across the units as well as the increase of knowledge-sharing and cooperation between the faculties. The audit team also suggests establishing mechanisms to strengthen an interdisciplinary culture at the University.

8.3 Enhancement of the quality culture

There is no doubt, that there is a very good standard of provision for degree programmes and research at the University. However, the audit team got the impression that the culture is too focused on keeping the status quo. A more dynamic future oriented approach in developing would be appropriate to match the next stage of development. The audit team discovered during the interviews with staff a lot of best practices related to quality enhancement. The audit team recommends making these best practice examples more visible to other University stakeholders.

Above all, the commitment towards excellence, that can be found almost everywhere at the University of Helsinki, and the positive disposition of staff in most fields and areas to further improve degree education and research activities provide evidence in their own right of the existence of a well-developed quality culture.

9 Conclusions

9.1 Strengths and good practices of the quality system

Strengths

- The University has nurtured good cross organisation identification with strategic goals and a commonly shared agreement about the need to follow the stated strategy.
- At the University of Helsinki there is high commitment to excellence and high quality. The commitment towards excellence, that can be found almost everywhere at the University of Helsinki, and the positive disposition of staff in most fields and areas to further improve degree education and research activities provide evidence in their own right of the existence of a well-developed quality culture.
- The main strategic goals are well known, and the identification of the staff with the goals to provide the best for society and to rank among the leading universities of the world is well developed, which provides a good foundation for the management of quality issues.
- The quality system of the University of Helsinki is designed to be an intrinsic part of the operations management. It is a functioning, stable and information based system with clearly defined responsibilities and dedicated tools. Information production and the various follow-up operations enable the responsible unit leaders to adapt their operational approach and meet the information needs of the university´s leadership.
- The establishment of Flamma is a major achievement for the quality management of the University. It appears to have been a catalyst for change and perhaps a turning point with some future potential for the harmonisation of quality procedures in the University in terms of clarity and visibility of operational procedures. It also provides a way to embed good practices within the University community.
- At the University great importance is placed on interactive forums, such as meetings between the Rector, the Deans and the Heads of Department, and other forums in the faculties and other units. These forums typically support an information flow in two directions and between different levels in the organisation. The intensity of these platforms again confirms the commitment of the University stakeholders to improve operations.

- Besides the academic staff and students, external stakeholders also participate in the quality work in degree education. There are several examples of the active co-operation of individual departments with the business sector, and their expertise is used both in the planning and in the implementation phase of degree education.
- Research support services have changed the production approach for research to a more user-centred approach and new services have been launched to assist researchers in the context of greater challenges and increasing competition.
- The University participates in various national and international research assessments. The University also conducts internal evaluations at regular intervals. The documents and interviews show that that the exploitation of feedback from various research assessments and evaluations is systematic.
- The newly developed partnership model, which refers to different categories of collaboration and partnerships; the division of responsibilities; and criteria for partnerships, contributes a very useful basis for quality assurance for partnership activities. The model strongly promotes the implementation of the University's strategic goals and should be applied across the organisation.

Good practices

- At the University of Helsinki some faculties have described the aspects of the quality systems in terms of the student lifecycle including the design and evaluation of the programme; teaching assessment and feedback; student admission progression and a variety of learning resources and support mechanisms such as a student mentoring system.
- The annual process of reviewing the operations manual from the point of view of the end-users is a good practice and covers the system as a whole.
- At the University of Helsinki there are several units and networks that provide support for the development of degree programmes and the sharing of expertise in areas such as university pedagogy. Examples of these good practice forms of support include the Centre for Research and Development of Higher Education, the Network of Senior Lecturers in University Pedagogy, the Educational Centre for ICT, the Teachers Academy and Teacher Cafés.
- The Department of Computer science utilises a wide variety of teaching methods in support of learning. For example the introduction of MOOCs, NODES Laboratory and the Software Factory as well as peer teaching provided by the final year students are all indications of commitment towards the diversification of learning methods and also a linkage between research and teaching activities.
- Pedagogical training and other training methods are included when calculating the annual workload, which further encourages academic staff to participate in such activities.
- A new unit referred to as the "Capacity Building in Exploitation and Research Funding" unit, has recently been launched to assist the researchers in planning projects with stronger societal impacts. The audit team considers this to be a very good example of developing operations to achieve the strategic objectives.

9.2 Recommendations

- Building on the quality components in place at present, the University of Helsinki would benefit from developing an overall blueprint for the architecture of the quality system. This should incorporate formalisation of the effective practices that currently support, develop and monitor quality in the University. The University could also consider and review how all of the quality management procedures, stakeholders and informal supports link to each other to form a system that is more visible and identifiable.
- It is recommended that the University of Helsinki track and record the impact of its quality work more visibly and focus more attention on demonstrating the benefits of the quality system. The University could provide enhanced analyses of the management information system outcomes and consider how they will inform the quality mandate. In addition, the University would benefit from considering how the plan for the formal development of the various databases will specifically support and guide the development of the quality system.
- The audit team encourages the University of Helsinki to define the quality outcomes, benchmark statements and metrics for all quality management activities to support staff awareness and understanding of the benefits of evaluation and continuous improvement. Quality management activities need to be applied systematically and the University could separate the autonomy of the academic unit from the autonomy of the quality management system. This would also help the development of the University towards becoming an interdisciplinary university.
- The audit team recommends the University to evaluate and analyse the large number of informal networks on sharing effective practices to ensure these can be captured on a more formal basis to help inform best practice systematically across the University's operations and activities.
- The audit team invites the University to consider establishing a method, using staff from different faculties engaging with staff from other diverse faculties to support the internal monitoring. This could strengthen the installed monitoring system and help to work with the existing information base. The monitoring system should ensure that the University, and especially the unit leaders, are capable of managing change in a rapidly changing and external environment.
- The audit team suggests that the University develops a leadership initiative to strategically support and promote an exchange of sharing effective practices of the quality management procedures for degree education, research and societal interaction and establish appropriate forums to capture this.
- The audit team recommends that the University of Helsinki considers investing in training development and support for staff positions identified across all staff as core to the continuous development of the quality management system. The University would consider establishing a system of in-house training for quality assurance and management initiatives.
- The audit team recommends the promotion of a more open and flexible recruitment practice to assist the University in becoming more attractive to candidates on the

international 'market'. This includes academics from other countries in addition to internationally experienced Finnish nationals. In implementing the international strategy the University should perhaps differentiate between different categories, e.g. doctoral students and post-doctoral students and also junior faculty and senior faculty positions, as they each require a specific approach.

- The University should carry out more analytical work on the development of international recruitment to date, including the tracking of the career paths of past and present international members of the University community. An analysis of factors encountered to date in terms of failures and successes in the recruitment of senior academics from abroad is crucial for any future success. It is also essential that the University collects the feedback and understands the views of international staff currently working at the University of Helsinki.

9.3 The audit team's overall assessment

The University of Helsinki's quality system fulfils the FINEEC criteria for the quality system as a whole and for the quality management as it relates to basic duties. None of the audit targets are 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 the University of Helsinki passes the audit.

9.4 Higher Education Evaluation Committee's decision

In its meeting on 27 February 2015, the Higher Education Evaluation Committee decided, based on the proposal and report of the audit team, that the quality system of the University of Helsinki meets the FINEEC criteria for quality systems as a whole and quality management of the higher education institution's basic duties. University of Helsinki has been awarded a quality label that is valid for six years beginning on 27 February 2015.

Appendix 1:
Table of the audit targets and criteria

TARGETS	CRITERIA			
	ABSENT	EMERGING	DEVELOPING	ADVANCED
1. The quality policy of the higher education institution	The quality system shows a complete absence of or major shortcomings in the: • definition of the system's objectives and responsibilities • knowledge and commitment of those responsible • documentation of the system and the information it produces or • suitable communication.	The quality system's objectives and responsibilities have not been clearly defined. The division of responsibility works only partially, and those responsible for the operations exhibit widely differing skill levels and commitment to their duties. The quality system and the information it produces are inadequately documented. The information needs of the HEI's personnel groups, students or external stakeholders are not adequately addressed in the documentation. Information produced by the system is not systematically communicated within the institution or to external stakeholders.	The quality system's objectives and responsibilities are clearly defined. The goalsetting process is an inclusive one. The division of responsibility functions well. The key people responsible for the operations are committed to their duties and have sufficient skills to undertake them. The quality system and the information it produces is documented in a clear and appropriate manner. For the most part, the information needs of the HEI's personnel groups, students and external stakeholders are taken into account in the documentation. The information produced by the system is communicated in a systematic and targeted manner within the institution and to external stakeholders.	The objectives of the quality system are defined in a very clear and inclusive manner. The objectives and division of responsibility provide excellent support for the development of the institution's operations. There is clear and continuous evidence of the skill level and commitment of those responsible for the operations. The HEI has systematic and wellestablished procedures for documenting the quality system and the information it produces so that the documentation satisfies the information needs of various parties. The institution has excellent and wellestablished procedures for communicating information to different personnel groups, students and external stakeholders. Communication is active and up-to date.

TARGETS	CRITERIA			
	ABSENT	EMERGING	DEVELOPING	ADVANCED
2. Strategic and operations management	The quality system shows a complete absence of or major shortcomings in the: • links to strategic planning, management and operations management • ability to meet the needs of strategic and operations management or • commitment to quality work of managers involved in operations management.	The quality system is not sufficiently well linked to the HEI's strategic planning, management and operations management. The system and the information it produces do not serve the needs of strategic and operations management in an appropriate manner. The system does not serve as a meaningful management tool at all organisational levels, and managers involved in operations management show a lack of commitment to joint quality work.	The quality system is quite well linked to the HEI's strategic planning, management and operations management. The system and the information it produces serve strategic and operations management, and there is evidence that the information is put to use. In terms of management, the system works at different organisational levels, and the managers involved in operations management are committed to joint quality work.	Quality management is a natural part of the HEI's strategic planning, management and operations management. The institution has systematic, well-established and excellent procedures that produce information for strategic and operations management needs, and there is clear and continuous evidence that information is put to systematic and wide use. In terms of management, the quality system works in an excellent manner at all organisational levels, and there is clear and continuous evidence that managers involved in operations management are committed to joint quality work.

TARGETS	CRITERIA			
	ABSENT	EMERGING	DEVELOPING	ADVANCED
3. Development of the quality system	The HEI shows a complete absence of or major shortcomings in the: • procedures for evaluating or developing the quality system or • overall view of the functioning of the quality system.	The HEI has inadequate procedures for evaluating and developing the quality system. It has a weak overall view of the functioning of the quality system. System development is not systematic.	The HEI has wellfunctioning procedures for evaluating and developing the quality system. It is able to identify the system's strengths and areas in need of development, and system development is systematic.	The HEI has wellestablished and systematic procedures for evaluating and developing the system. It is able to efficiently identify the system's strengths and areas in need of development, as well as to evaluate the effectiveness of the system. There is clear and continuous evidence of the system's successful development work.
Followup section for the HEIs subject to the second FINHEEC audit:	The HEI shows a complete absence of or major shortcomings in: • the development work following the first audit.	The development of the quality system after the first audit has not been systematic or effective.	The development of the quality system after the first audit has been systematic. The system works better than before.	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 very successful and effective manner.

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

TARGETS	CRITERIA			
	ABSENT	EMERGING	DEVELOPING	ADVANCED
4. Quality management of the higher education institution's basic duties **4a) Degree education** **4b) Research, development and innovation activities, as well as artistic activities** **4c) Societal impact and regional development work (incl. social responsibility, continuing education, open university and open university of applied sciences education, as well as paidservices education)** **4d) Optional audit target**	The quality system shows a complete absence of or major shortcomings in the: • quality management procedures used to achieve the goals set for the operations • links between goals set for the activities and the HEI's overall strategy • participation of the institution's personnel groups, students or external stakeholders in the development of the operations or • quality management of support services that are key to the operations.	The quality management procedures are not fully functional and do not support the achievement of goals set for the operations in a meaningful manner. The goals are not linked to the HEI's overall strategy. The quality system provides insufficient information for the quality management of the operations, and information use is sporadic and/or information collection is an end in itself. The personnel groups, students and external stakeholders are not involved in the development of the operations in a meaningful manner. The quality management of key support services is not functional.	Functional quality management procedures advance the development of the operations and the achievement of goals set for the operations. The objectives are mostly linked to the overall strategy of the HEI. The quality system produces relevant information for the quality management of the operations, and the information is used to develop the HEI's operations in a meaningful manner. Personnel groups and students are involved in the development of the operations in a meaningful manner. External stakeholders also participate in the development work. The quality management of key support services functions relatively well.	The HEI has systematic and wellestablished quality management procedures that provide excellent support for the development of the operations and the implementation of the institution's overall strategy. There is clear and continuous evidence of the system's effectiveness in achieving the goals set for the operations. The HEI has systematic and excellent procedures used to produce information for the quality management of the operations. Information is used systematically, and there is clear and continuous evidence to show that it is successfully used to develop the operations. Personnel groups and students are committed and very actively involved in developing the operations. Special attention has been given to the workload generated by the quality management procedures. External stakeholders are involved in the development work in a meaningful manner. The HEI has systematic and wellestablished procedures for the quality management of key support services. There is clear and continuous evidence that the 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 education** • 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 • Participation of different personnel groups, students and external stakeholders. **Implementation of education** • Teaching methods and learning environments • Methods used to assess learning • Students' learning and wellbeing • Teachers' competence and occupational wellbeing • Participation of different personnel groups, students and external stakeholders. **Effectiveness of quality work** • Suitability of key evaluation methods and followup indicators and their impact on the achievement of goals.	The quality system shows a complete absence of or major shortcomings in the: • quality management procedures related to the planning of education • quality management procedures related to the implementation of education • participation of the institution's personnel groups, students or external stakeholders in the development of the operations or • effectiveness of the quality work.	The quality management procedures related to the planning of education are not fully functional and do not support the planning of education in a meaningful manner. The quality management procedures related to the implementation of education are not fully functional and do not support implementation in a meaningful manner. The personnel groups, students and external stakeholders are not involved in developing the operations in a meaningful manner. There is little evidence of the effectiveness of the quality work.	The quality management procedures related to the planning of education enhance the quality of planning and support planning itself. The quality management procedures related to the implementation of education enhance the quality of the implementation and support implementation itself. Personnel groups and students are involved in developing the operations in a meaningful manner. External stakeholders also participate in the development work. There is clear evidence of the effectiveness of the quality work.	The quality management procedures related to the planning of education are systematic and wellestablished and provide excellent support for planning. The quality management procedures related to the implementation of education are systematic and wellestablished and provide excellent support for implementation. Personnel groups and students are committed and very actively involved in the development of the operations. External stakeholders are also involved in the development work in a meaningful manner. There is clear and continuous evidence of the effectiveness of the quality work.

TARGETS	CRITERIA			
	ABSENT	EMERGING	DEVELOPING	ADVANCED
6. The quality system as a whole	The HEI has only individual and unrelated quality management procedures that do not form a structured system. There is no evidence of the procedures' impact on the development of the operations.	The quality management procedures do not form a functioning and unified system. The quality system encompasses some of the HEI's basic duties but does not provide meaningful support for the development of the operations. There is little evidence of the system's impact on the development of the operations. The institution's quality culture is only just emerging.	The quality management procedures constitute a functioning system. The quality system covers the essential parts of the basic duties of the HEI and provides meaningful support for the development of the operations. There is evidence that the system has an impact on the development of the operations. The development of the operations is based on an existing quality culture.	The quality management procedures form a dynamic and comprehensive system. The quality system covers all of the basic duties of the HEI and provides excellent support for the institution's overall strategy and the development of the entire institution's operations. There is clear and continuous evidence that the system has an impact on the development of the operations. The well-established quality culture provides excellent support for the development of the operations.

Appendix 2:
The stages and timetable of the audit process

Agreement negotiations between the University of Helsinki and FINHEEC	15 January 2014
Appointment of the audit team	25 March 2014
The audit materials and self-evaluation report submitted to FINEEC	20 June 2014
An information and discussion events at the University of Helsinki (two seminars)	10 September 2014
Audit visit	6 – 9 October 2014
Audit decision	27 February 2015
Concluding seminar	16 March 2015

Appendix 3:
Programme of the audit visit

MONDAY 6 OCTOBER 2014	
9.30 —10.50	University leadership
11.00—11.50	Board
13.00—13.50	Central Administration: University services
14.00—14.50	Presentation of the documentation of the Quality System
15.00—15.50	Deans (two interview sessions)
16.00—16.50	Quality coordinators (two interview sessions)
TUESDAY 7 OCTOBER 2014	
9.00—10.50	**Sample of degree-oriented education: Bachelor´s and Master´s degree education in Computer Science**
	9.00 – 9.50 Faculty and staff: Bachelor´s and Master´s degree education in Computer Science
	10.00 – 10.50 Students: Bachelor´s and Master´s degree education in Computer Science
11.00—13.00	**Sample of degree-oriented education: Bachelor and Licentiate degrees in Veterinary Medicine**
	11.00 – 11.50 Faculty and staff: Bachelor and Licentiate degrees in Veterinary Medicine
	12.00 – 12.50 Students: Bachelor and Licentiate degrees in Veterinary Medicine
14.00—14.50	Optional audit target: Staff recruitment for an international university (Unit heads/directors, recruitment coordinators, support services)
15.00—15.50	International staff members and students
16.00—16.50	Research, development and innovation activities (Faculty and staff, two interview sessions)

WEDNESDAY 8 OCTOBER 2014	
9.00—10.50	**Sample of degree-oriented education: Licentiate and Doctor of Philosophy degrees at the Faculty of Arts**
	9.00 – 9.50 Faculty and staff: Licentiate and Doctor of Philosophy degrees at the Faculty of Arts
	10.00 – 10.50 Students: Licentiate and Doctor of Philosophy degrees at the Faculty of Arts
11.00 – 12.50	**Sample of degree-oriented education: Bachelor's and Master's degree education in Economics**
	11.00 – 11.50 Faculty and staff: Bachelor's and Master's degree education in Economics
	12.00 – 12.50 Students: Bachelor's and Master's degree education in Economics
14.00 – 14.50	Societal interaction: Chancellor of the University of Helsinki, University Consortiums, Communications and Community Relations sector
15.00 – 15.50	Independent institutes: Institutes for research, services and teaching
16.00 – 16.50	External stakeholders
THURSDAY 9 OCTOBER 2014	
9.30– 10.20	Additional audit target: Academic affairs council
10.30 – 11.20	Thematic interviews: Quality work at the department level (Faculty, staff and students, two interview sessions)
11.30 – 12.20	Quality management of teaching and learning: Expert units and communities, Support and service functions
15.00 -16.00	Final interview with the university leadership with preliminary feedback

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.

The Finnish Education Evaluation Centre and its predecessor the Finnish Higher Education Evaluation Council have conducted audits of the quality systems of higher education institutions since 2005. The aim of the audits is to help institutions achieve their strategic objectives and steer future development activities in order to create a framework for the institutions' continuous development. Audits evaluate whether the quality system fulfils the FINEEC criteria set for the quality management of higher education institutions and whether it corresponds to the European principles and recommendations for quality management.

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