

**Starting Tuning of OT Master competences:
Comparing masters' programmes to
facilitate collaboration in OT education**

Project phase II

Report of the ENOTHE Masters Tuning Project Group

written by the

ENOTHE Masters Project Group

Austria: Master of Science in Occupational Therapy; Ursula Costa, Pier Paolo Pasqualoni (fh gesundheit – University of Applied Sciences Tyrol, A)

Belgium: Master of Science in Occupational Therapy, interuniversity programme of Flanders; Daphne Kos [Dominique van de Velde] (KU Leuven, UGent, B)

Canada: Maîtrise en ergothérapie, MSc Profil B, Lise Poissant, Marc Rouleau (Université de Montréal, CAN)

Consortium (CH, DK, NL, SWE, UK): European MSc in Occupational Therapy: Fenna van Nes, Debbie Kramer-Roy

Germany: Master of Science Occupational Therapy, Speech and Language Therapy, Physical Therapy; Sandra Schiller [Ulrike Marotzki] (HAWK University of Applied Sciences and Arts Hildesheim, GER)

Switzerland: Master of Science in Health Sciences, Isabel Margot-Cattin, Sylvie Meyer (Univ. of Applied Sciences of Western Switzerland, CH)

United Kingdom: MSc Occupational Therapy (pre-registration) programme, Alison Laver-Fawcett, (York St. John Univ., UK)

Contents

Introduction and rationale for the project	3
Objective	4
Project Aims	4
Project organisation and processes in project phase II	5
Results and deliverables	7
Table 1. Shared curriculum areas with descriptions in alphabetical order	8
Table 2. Shared Curriculum Areas in OT Master Programmes with selected illustrative examples of learning outcomes.	11
Table 3. Reduced examples of learning outcomes and illustrative examples of assessments.....	15
Reactions and feedback from workshop participants over the course of 2 years	22
Reflections	23
Future perspectives	24
Budget	25
References	26

Introduction and rationale for the project

In 2008, the ENOTHE Tuning report defined descriptors in the form of generic and specific competences (TUNING Occupational Therapy Project Group, 2008) for Masters students who have already been qualified respectively registered as occupational therapists, also defined as post-registration Masters level. However, it is not known how post-registration Masters programmes for occupational therapists use the Tuning reference points in practice and how they implement quality guidelines. Furthermore, it is unknown how the 2008 competences fit to new/contemporary educational and societal developments.

The World Federation of Occupational Therapists (WFOT, 2016) developed minimum standards for the pre-registration (Diploma/Bachelor) education of occupational therapists (referring to the first cycle in the European Qualification Framework; European Commission, 2013). So far, there is no such WFOT standards document for post-registration Master's education.

An ongoing and well-established exchange of experiences and new approaches relevant for first cycle education in Occupational Therapy (Bachelor resp. Diploma education) had grown within ENOTHE. The more recently merging Masters programmes in Occupational Therapy, at this stage, did not yet have an established tradition for doing so. By initiating a thematic group work relevant to Master education within ENOTHE, the vision for sharing and collaborating more intensely also on Master's level and therefore strengthening new and important educational/academic/professional developments played an important role.

The ENOTHE Masters Tuning Project Group was established in 2012 to explore and address these issues. A **quality frame of reference related to competences and learning outcomes** is needed within ENOTHE, to support exchange of knowledge and processes throughout Europe at the post-registration level. Mutual exchange is expected to enhance the quality of the Master programmes and thereby fosters the development of occupational therapy education and research with ultimate transfer into further developing practice, education, and research.

In project phase I, as a first step to develop such a quality frame for learning outcomes and main characteristics of Masters programmes, eight Occupational

Therapy (OT) Masters and interdisciplinary Masters programmes with special relevance to occupational therapy/occupational science were compared as a basis for student and staff exchange and as a foundation for exploring other types of collaboration, both across Europe and internationally. Learning outcomes / competences for the Masters programmes from the institutions of the project partners were compared and contrasted (ENOTHE project report phase I, 2015). These learning outcomes / competences were grouped together into sixteen distinct curriculum areas to facilitate comparison, description and documentation, highlighting OT specific competences / learning outcomes at a Master's level.

Objective

The primary objective of the whole project (both phases) was to initiate the development of a framework for describing and comparing OT Masters' competences as a starting point for educational exchange across programmes in an international context.

Project Aims

- Phase I: to compare Masters' curricula related to their competence descriptors and / or learning outcomes, and to relate these to the Tuning reference points for Masters education, as described by ENOTHE (2008).
- Phase II: to develop a common frame of reference for Masters programmes for Occupational Therapists in Europe, which is in line with the European Qualification Framework (European Commission, 2010; 2013).

Sub-aims:

1. To explore similarities and differences within the curricula (phase I);
2. To refer, compare and discuss these in relation to the ENOTHE Tuning reference points and to the European Qualification Framework, as relevant to OT specific second level descriptors (phase I);
3. To compare, describe, document and highlight OT specific competences/learning outcomes at a Master's level (referring to Masters programmes in Occupational Therapy and/as compared to Interdisciplinary Masters programmes) (second cycle) (phase II);

4. To organise, present and disseminate OT specific competences / learning outcomes and examples of assessments at a Master's level (referring to Masters programmes in Occupational Therapy and/as compared to Interdisciplinary Masters programmes) (second cycle) (phase II);
5. To contribute to facilitating collaboration between Masters programmes for OTs in Europe and internationally, including student and staff mobility (phase II).

Project organisation and processes in project phase II

The project group had been formed through an open invitation at a meeting of the European Network of Occupational Therapists in Higher Education (ENOTHE) in 2012 (see project report phase I). While several academics representing graduate programmes (occupational therapy specific and interdisciplinary) from different countries showed interest in the project, seven programmes formed the core project team that sourced and reviewed the secondary data in the form of programme, courses and module documents.

The project group aimed to reach consensus within the group but also through discussion with wider groups of academics through a series of workshops delivered at ENOTHE annual meetings (as listed below). The developmental process took over from where phase I had come until 2015, with a preliminary validation of results (table of 16 highlighted OT specific competencies / learning outcomes).

Personal meetings were held twice a year during the two years of the second phase of the project to add to quality and efficacy of this work phase:

- Innsbruck (June 28-29, 2015),
- Ruse (October 21, 2015),
- Leuven (March 3-4, 2016), and
- Galway (June 15, 2016).

At ENOTHE meetings the project group offered workshops:

One workshop was held in Ruse on discussing proposed master curriculum areas and related example learning outcomes (Costa et al, 2015).

(Costa U, Pasqualoni P, Kos D, Laver-Fawcett A, Margot I, Rouleau M, Poissant L, Schiller S, Marotzki U, van Nes F (2015). Discussing proposed master curriculum areas and related example learning

outcomes. ENOTHE annual meeting, Ruse (BG), October 23rd 2015: workshop.
(<http://enothe.eu/Wordpress%20Documents/Ruse%20Info/Presentations/Workshop%208.pdf>)

Two workshops were held in Galway at the joint ENOTHE-COTEC meeting, on the shared curriculum areas and learning outcomes and on facilitating international collaboration at the master's level (Costa et al, 2016; Schiller et al, 2016).

Costa U, Kos D, Laver-Fawcett A, Margot I, Pasqualoni P, Rouleau M, Poissant L, Schiller S, van Nes F, Kramer-Roy D (2016). Occupational Therapy Master's Education in Europe: Shared curriculum areas and example learning outcomes. Council for Occupational Therapists for the European Countries (COTEC) and European Network of Occupational Therapists in Higher Education (ENOTHE) 1st Joint Congress. Galway, Ireland. June 15-19th 2016: workshop.
see: <http://programme.exordo.com/cotec-enothe2016/delegates/presentation/511/>

Schiller S., Rouleau M., Poissant L., Pasqualoni P., van Nes F., Margot I., Laver-Fawcett A., Kos D., Costa U., Kramer-Roy D. (2016). Facilitating international cooperation on the master's level. COTEC ENOTHE Joint Conference. Galway (IRL), June 15-19 2016: workshop.
see: <http://programme.exordo.com/cotec-enothe2016/delegates/presentation/513/>

In addition, the project partners exchanged continually by e-mails and held regular virtual meetings by skype, using a collaborative action process to collect, review, discuss and develop shared curriculum areas.

“Shared curriculum areas” are here areas addressed by OT-specific as well as interdisciplinary Master's programmes represented in this work group, such as *“advanced problem solving”* or *“leadership”*.

“Relevant curriculum areas” were filtered based on their relevance to Master's education, especially related to Occupational Therapy and Occupational Science.

“Illustrative examples” should make the according area more explicit and understandable and link it to “practical examples” as implemented already in Master's education within the participating programmes.

Step 1: Preliminary validation of results

The results were reviewed by a group of interested representatives from other Master programmes using e-mail communications. This resulted in one new curriculum area being added to the list.

The revised list of 17 curriculum areas was discussed in a workshop at the ENOTHE meeting in Ruse, Bulgaria, in October 2015, where participants were asked if these areas reflected their own programme. Consequently, the project team reviewed the areas again by going back to the original learning outcomes to describe and define the final 17 curriculum areas (see Table 1). Examples of learning outcomes were added to each of the areas. This allowed the creation of shared **qualifying verbs** for each of the curriculum areas. In this process, the order and formulation of the chosen areas were again reconsidered resulting in the final table (see Table 2).

Step 2: Selecting the final set of learning outcomes and learning examples.

To make the list of shared curriculum areas and shared qualifying verbs more educational practice oriented, we used a process of discussion and comparison, and decided to include a few **illustrative examples** for each of the curriculum areas (see Table 2). The list of discussed examples was revised again among the group and a few amendments were made to arriving at the most feasible illustrative examples. It was decided to also include **illustrative examples of assessments** (see Table 3).

Results and deliverables

The results and deliverables of the Master's project group are presented here in three tables: Table 1 provides definitions to the 17 shared curriculum areas with descriptions, table 2 offers qualifying verbs of master level competences and illustrative examples for each curriculum area, and table 3 shows illustrative examples of assessments for each area.

Table 1 lists the 17 shared curriculum areas for which the project group provides descriptions and definitions from professional literature in order to explicit the meaning and focus of each area. The shared curriculum areas are arranged by alphabetical order and do not indicate a hierarchy.

The descriptions were added in the last stage as a reaction to questions from participants in the Ruse and Galway workshops (Costa et al. 2015; Costa et al. 2016) which showed a need for more information of what the group considered to be

covered by the individual curriculum areas (see “Reactions and Feedback from Workshop Participants” below).

Table 1. Shared curriculum areas with descriptions in alphabetical order

	Shared curriculum areas	Descriptions
1	Advanced problem solving	‘Problem solving is based on an information processing theoretical approach...Problem solving is described as a series of steps including referral, data collection, assessment, problem identification, planning, intervention and evaluation, which is mirrored by the OT process’ (Robertson and Griffiths, 2012).
2	Advocacy through collaborative partnership	Advocacy is an “enablement skill” enacted with or for people to raise critical perspectives, prompt new forms of power sharing, lobby or make new options known to key decision makers: to speak, plead, or argue in favour of (Houghton-Mifflin Company, 2004).
3	Critical thinking and professional reasoning	<p>Critical thinking is the “intentional application of rationale, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference and evaluation” (Torcivia and Gupta, 2008, pCE-3).</p> <p>This is also applicable in the context of Occupational Science, e.g. related to critical socio-political analysis.</p> <p>Professional reasoning ‘is closely aligned to clinical reasoning, which is “a process in which the clinician, interacting with significant others (client, caregivers, health care team members), structures meaning, goals, and health management strategies based on clinical data, client choices, and professional judgement and knowledge” (Higgs & Jones, 2000, p. 11). The phrase professional thinking is also used in preference to clinical reasoning because it is more inclusive, respecting the fact that occupational therapists work in a wide range of settings (Boyt Schell & Schell, 2008; Paterson & Summerfield-Mann, 2006).’ (Bannigan and Moores, 2009, p. 343)</p>
4	Dissemination and Knowledge Translation	“Support the use of best evidence, and the distribution and translation of new knowledge into occupational therapy practice ” Profile of Occupational Therapy Practice in Canada (CAOT, 2012)
5	Ethics and ethical reasoning	<p>Knowledge of research ethics and ability to critically reflect on ethical issues in the research process.</p> <p>Ethical reasoning in OT practice specifically includes a critical reflection of the profession’s ethical and societal responsibilities in the context of contemporary health and social services (Bailey & Schwartzberg, 1995; WFOT, 2005).</p>

6	Evidence-based approach to service delivery	<p>Approach that provides knowledge of client, environment and occupational factors relevant to enabling occupation. Evidence derived from a critical review or the research literature, expert consensus and professional experience (CAOT, ACOTUP, ACOTRO & PAC, 1999, p. 267).</p> <p>“Evidence-based practice requires that decisions about health [and social] care are based on the best available, current, valid and relevant evidence. These decisions should be made by those receiving care, informed by the tacit and explicit knowledge of those providing care, within the context of available resources” (Dawes et al., 2005, p. 4).</p>
7	Guidelines, standards and systems (e.g. quality, health & social care)	<p>“Occupational therapy domain and process and interventions that occur within the boundaries of acceptable practice. The guidelines can be a useful tool for improving the quality of health care, enhancing consumer satisfaction, promoting appropriate use of services, and reducing costs”(AOTA, 2017)</p>
8	Innovative approaches, creativity and entrepreneurial skills	<p>“(…) to think creatively and to develop innovative ways to deliver services and conduct practice to enhance people's lives” (McClure, 2011); “(…) to have the knowledge and skills to recognize and cultivate opportunities, assess risk, communicate convincingly” (Holmes & Scaffa, 2009).</p>
9	Leadership	<p>Leaders should be motivated “to influence care and support health outcomes for people”. “(…) Success in leadership participation” include “capacity in relationship building and relationships, …a practically focussed vision, …confidence and professional credibility associated with competence” (Heard, 2014, p 10)</p>
10	Life-long learning and continuing professional development (CPD)	<p>“Maintain and enhance personal competence through ongoing learning in a thorough and systematic manner” - Profile of Occupational Therapy Practice in Canada (CAOT, 2012)</p> <p>“Participate in professional development through life-long learning and apply their knowledge and skills in their professional work which is based on best available evidence” (World Federation of Occupational Therapists, 2005)</p>
11	Management of services and resources	<p>“Lead or support activities that contribute to the effectiveness of organizations and systems” - Profile of Occupational Therapy Practice in Canada (CAOT, 2012)</p>
12	Measurement	<p>“Data obtained by measuring. Measuring is undertaken by therapists to ascertain the dimensions (size), quantity (amount) or capacity of a trait, attribute or characteristic of a person that is required by the therapist to develop an accurate picture of the person’s needs and problems to form a baseline for therapeutic intervention and to provide a measure of outcome (Laver Fawcett, 2007)</p>
13	Occupational Therapy and Occupational Science	<p>“Use knowledge of occupation, occupational performance, and occupational engagement, and other appropriate processes and interventions of enablement in the evidence-</p>

	concepts and applications	based provision of client-centred service” - Profile of Occupational Therapy Practice in Canada (CAOT, 2012) “Occupational science studies the things that people do in their everyday lives and how those occupations influence and are influenced by health, wellbeing and their environment.” (World Federation of Occupational Therapists, 2012a, p.1)
14	Policy development	“vision, priorities, budgetary decisions and course of action for improving and maintaining population health”(WHO, 2017)
15	Promotion of an occupational perspective at micro-, meso- and macrolevel	“Advocate for the occupational potential, occupational performance, and occupational engagement of clients including organizations, populations, and those in complex situations” - Profile of Occupational Therapy Practice in Canada (CAOT, 2012)
16	Research	This shared curriculum area includes philosophy of science and epistemological and methodological issues. Research in Occupational Therapy and Occupational Science aims to exploring and investigating topics related to human occupation, humans as occupational beings, and to further developing Occupational Therapy practice and education. This serves to generate knowledge and provide insights relevant to Occupational Therapy practice and theory, as well as to Occupational Science.
17	Service & programme development and evaluation, and quality assurance	“Effectively execute responsibilities and make systematic choices about client service resources..... developing and supporting sustainable practices, managing caseloads, allocating resources, and demonstrating accountability to the public and funders for contributing to effective client programs and services that enable participation through occupation.” - Profile of Occupational Therapy Practice in Canada (CAOT, 2007)

Table 2 presents the results in terms of shared curriculum areas, relevant qualifying verbs, and selected illustrative examples of learning outcomes. Assessments related to each specific area are presented in Table 3. In order to distinguish the Master from the Bachelor level, these shared curriculum areas are combined with relevant qualifying verbs to describe the competence level expected from Master students. The learning outcomes are formulated to be OT specific and generic for interdisciplinary programmes. The “illustrative examples” from the participants’ Master programmes mirror a mixture of broad and specific outcomes in order to reflect the depth of tuition and skill development necessary for each area.

Table 2. Shared Curriculum Areas in OT Master Programmes with selected illustrative examples of learning outcomes.

	Shared curriculum areas	Relevant qualifying verbs	Selected illustrative examples of learning outcomes
1	Advanced problem solving	Demonstrate, synthesise, critically analyse, problem solve [ability]	<ul style="list-style-type: none"> - Self-direction and originality in tackling and solving problems, and the ability to act autonomously in planning and implementing tasks - Select and implement problem-solving and context-appropriate negotiation strategies (with clients, in a team, in a leadership role, in an academic context)
2	Advocacy through collaborative partnership	Promote, facilitate, communicate, advocate, adapt, collaborate, enabling change [change agent]	<ul style="list-style-type: none"> - Advocate for occupational participation in collaboration with and for diverse societal groups - Have a deep understanding of enablement and empowerment as occupational therapy approaches to strengthening the occupational performance, participation and quality of life of clients - Develop adequate action and participation-oriented initiatives with and for diverse groups of people
3	Critical thinking and professional reasoning	Apply, reason, reflect	<ul style="list-style-type: none"> - Critically reflect on contemporary theories and development in occupational therapy theory in relation to clinical practice - Explicitly and reflexively deploy diverse ways of professional reasoning
4	Dissemination and Knowledge Translation	Design, demonstrate knowledge, communicate, write, identify, influence	<ul style="list-style-type: none"> - Recommend pertinent strategies to apply the results of the research project taking into account the characteristics and context of knowledge users - Effectively communicate complex ideas to a range of specialist and non-specialist audiences, specifically including clients, patients, and other professionals
5	Ethics and ethical reasoning	Demonstrate, independently consider, influence	<ul style="list-style-type: none"> - Evaluate and make judgements of ethical issues and dilemmas in relation to the implementation of occupational therapy interventions for groups and individuals - Critically engage in the discussion of and resolution of ethical dilemmas in the research process - Demonstrate a critical awareness of ethical questions regarding health, illness and disability
6	Evidence-based	Critically apply,	<ul style="list-style-type: none"> - Apply evidence to the development of OT

	approach to service delivery	reflect, identify, research, critically evaluate, synthesise, identify, influence practice, contribute to social dialogue [reflexive practice]	<p>programs/services</p> <ul style="list-style-type: none"> - Discern application of evidence in planning positive change in a health and social care setting - Establish analysis of potentials to transfer evidence from other countries to one's own cultural and national context
7	Guidelines, standards and systems (e.g. quality, health & social care)	Implement, contribute to development, critically appraise	<ul style="list-style-type: none"> - Identify and critically reflect on socio-political influences on health and the occupational therapy process - Contribute to the development of multidisciplinary or OT specific guidelines for treatment and assessment
8	Innovative approaches, creativity and entrepreneurial skills	Can work in complex environments, build up and align networks	<ul style="list-style-type: none"> - Respond to client and societal needs when developing new programmes or initiatives - Facilitate sustainable network building between occupational marginalized groups and community organisations, in order to develop programmes that will provide for their occupational needs and participation in society - To acknowledge uncertainties, ambiguity and limits of occupational therapy
9	Leadership	Provide, communicate, lead, develop, influence	<ul style="list-style-type: none"> - Design or implement strategies to strengthen team collaboration and efficiency - Demonstrate a critical awareness of current problems and/or new insights at the forefront of leadership, innovation, and resilience in the allied health professions - Demonstrate competence in the independent conception, planning, completion and evaluation of projects
10	Life-long learning and continuing professional development (CPD)	Evaluate, plan, design, implement, reflect	<ul style="list-style-type: none"> - Have the ability to continue studying and implement evidence-based practice in a largely self-directed or autonomous manner
11	Management of services and resources	Manage, organise, supervise, evaluate, report	<ul style="list-style-type: none"> - Implement change management in organisations (e.g. in OT departments, private OT practices, participatory ergonomics in the workplace) - Be able to judge the development of financial-economic reports and their impact on the financial management of OT services

12	Measurement	Critically appraise, select, improve, know how to develop	<ul style="list-style-type: none"> - Critically appraise, select, improve and apply measurement and clinimetrics - Contribute to the development of multidisciplinary or occupational therapy specific assessment guidelines
13	Occupational Therapy and Occupational Science concepts and applications	Demonstrate in-depth knowledge and understanding, evaluate, apply [on all levels: societal, public health,...], advocate, collaborate	<ul style="list-style-type: none"> - Analyse and discuss theories, models and concepts from occupational science - Make connections between occupational science and occupational therapy - Understanding of intra- and interdisciplinary theories and approaches to occupation, health and participation
14	Policy development	Advocate, develop, communicate, review, influence	<ul style="list-style-type: none"> - Advise local policy strategies within the context of increasing impact of European (health care) at the national, European & global level - Advocate for an occupational perspective in the development and implementation of policies and local, national or international strategies, oriented on health promotion
15	Promotion of an occupational perspective at micro-, meso- and macrolevel	Advocate, communicate, negotiate, influence	<ul style="list-style-type: none"> - Demonstrate a critical awareness of current problems and/or new insights at the forefront of promotion of activity and participation - Have knowledge of political reasoning in occupational therapy and value meaningful occupation and participation in regard to human dignity, participation and occupational justice - Act on various occupational possibilities and occupational performance including defence of human needs or interests, health promotion and prevention
16	Research	Research, develop, conduct, analyse, identify, critically approach, assess, measure	<ul style="list-style-type: none"> - Demonstrate a critical understanding of established and novel methodological approaches and techniques of research in a health and social care setting - Able to write research applications - Undertake, present and discuss occupational science and occupational therapy research projects - Apply knowledge of descriptive and inferential statistics and basics of further statistical possibilities to reveal OT diagnostics, intervention, prognostic and risk & harm research
17	Service & programme	Act independently,	<ul style="list-style-type: none"> - A systematic understanding of knowledge related to quality improvement and risk in

	development and evaluation, and quality assurance	reflect, research, evaluate, develop, identify, influence	<p>health and social care contexts</p> <ul style="list-style-type: none"> - Evaluate, select and apply innovative analysis and approaches in relation to human occupation, everyday life and health including involvement of clients and health professional perspectives - Have an insight into the fundamentals of quality-management and case-management - Collaborate with client groups to facilitate the development of initiatives that address their occupational needs
--	---	---	--

Table 3 offers examples of possible assessments in regard to each curriculum area and specific learning outcomes to stress the level of expected achievement in a master programme.

Table 3. Reduced examples of learning outcomes and illustrative examples of assessments

	Shared curriculum areas	Relevant qualifying verbs	Selected illustrative examples of learning outcomes	Examples of Assessments
1	Advanced problem solving	Demonstrate, synthesise, critically analyse, problem solve [ability]	<ul style="list-style-type: none"> - Self-direction and originality in tackling and solving problems, and the ability to act autonomously in planning and implementing tasks [York] - Select and implement problem-solving and context-appropriate negotiation strategies (with clients, in a team, in a leadership role, in an academic context) [Hildesheim] 	Out of College Project with presentation of the results in a written and oral report (20 pages plus appendix).
2	Advocacy through collaborative partnership	Promote, facilitate, communicate, advocate, adapt, collaborate, enabling change [change agent]	<ul style="list-style-type: none"> - Advocate for occupational participation in collaboration with and for diverse societal groups [Montreal] - Have a deep understanding of enablement and empowerment as occupational therapy approaches to strengthening the occupational performance, participation and quality of life of clients [Innsbruck] - Develop adequate action and participation-oriented initiatives with and for diverse groups of people [Innsbruck] 	<p>Individual Critical reflexion (10 pages) on how to integrate in your practice, concepts of social OT, occupational science and advocacy supported by scientific literature and resources/tools seen in class.</p> <p>Student Team led seminars (3 hrs) on specific themes (e.g.occupational justice, social OT constructs, power and participation).</p>

3	Critical thinking and professional reasoning	Apply, reason, reflect	<ul style="list-style-type: none"> - Critically reflect on contemporary theories and development in occupational therapy theory in relation to clinical practice [Innsbruck] - Explicitly and reflexively deploy diverse ways of professional reasoning [Innsbruck] 	Discourse-development and scientific reasoning concerning the occupational therapy models through seminars and presentations.
4	Dissemination and Knowledge Translation	Design, demonstrate knowledge, communicate, write, identify, influence	<ul style="list-style-type: none"> - Recommend pertinent strategies to apply the results of the research project taking into account the characteristics and context of knowledge users [Montreal] - Effectively communicate complex ideas to a range of specialist and non-specialist audiences, specifically including clients, patients, and other professionals [York] 	Student teams conduct a critically appraised topic and to develop knowledge transfer (KT) strategies in order to incorporate new knowledge into practice. KT strategies must address the clinical context and patient preferences.
5	Ethics and ethical reasoning	Demonstrate, independently consider, influence	<ul style="list-style-type: none"> - Evaluate and make judgements of ethical issues and dilemmas in relation to the implementation of occupational therapy interventions for groups and individuals [Lausanne] - Critically engage in the discussion of and resolution of ethical dilemmas in the research process [Innsbruck] - Demonstrate a critical awareness of ethical questions regarding health, illness and disability [Innsbruck] 	Seminars integrating literature study and group discussion about ethical issues.

6	Evidence-based approach to service delivery	Critically apply, reflect, identify, research, critically evaluate, synthesise, identify, influence practice, contribute to social dialogue [reflexive practice]	<ul style="list-style-type: none"> - Apply evidence to the development of OT programs/services [Lausanne] - Discern application of evidence in planning positive change in a health and social care setting [York] - Establish analysis of potentials to transfer evidence from other countries to one's own cultural and national context [Hildesheim] 	<p>Written course work (20 pages) on analysis of potentials to transfer evidence from other countries to one's own.</p> <p>Writing a critical appraisal of literature: one qualitative and one quantitative peer-reviewed article.</p>
7	Guidelines, standards and systems (e.g. quality, health & social care)	Implement, contribute to development, critically appraise	<ul style="list-style-type: none"> - Identify - and critically reflect on - socio-political influences on health and the occupational therapy process [Innsbruck] - Contribute to the development of multidisciplinary or OT specific guidelines for treatment and assessment [Belgium] 	Critically appraise and adapt (parts of) clinical practice guidelines.
8	Innovative approaches, creativity and entrepreneurial skills	Can work in complex environments, build up and align networks	<ul style="list-style-type: none"> - Respond to client and societal needs when developing new programmes or initiatives [Innsbruck] - Facilitate sustainable network building between occupational marginalized groups and community organisations, in order to develop programmes that will provide for their occupational needs and participation in society [Innsbruck] 	Students are asked to design, plan, implement, document, evaluate, and present a project in response to current societal resp. client needs; their responsiveness, innovative reasoning and entrepreneurial skills are to be experienced in their final presentation and report.

			<ul style="list-style-type: none"> - To acknowledge uncertainties, ambiguity and limits of occupational therapy [Belgium] 	
9	Leadership	Provide, communicate, lead, develop, influence	<ul style="list-style-type: none"> - Design or implement systems to strengthen team effectiveness [Montreal] - Demonstrate a critical awareness of current problems and/or new insights at the forefront of leadership, innovation, and resilience in the allied health professions [York] - Demonstrate competence in the independent conception, planning, completion and evaluation of projects [Innsbruck] 	Student teams are paired with a community based organisation to work on a specific project identified by the organisation. Using knowledge and tools provided in class, students must ensure active participation of all stakeholders thus obtaining optimal collaboration and outcomes.
10	Life-long learning and continuing professional development (CPD)	Evaluate, plan, design, implement, reflect	<ul style="list-style-type: none"> - Have the ability to continue studying and implement evidence-based practice in a largely self-directed or autonomous manner [Innsbruck] 	In their pre-final phase of their Master's studies, students are asked to self-evaluate their competences, knowledge, skills, and attitudes, based on the curriculum's learning outcomes and related to current professional development and roles. After identifying areas which they personally choose for growing further, they present a plan of how to practically realize these aims and visions.
11	Management of services and resources	Manage, organise, supervise, evaluate, report	<ul style="list-style-type: none"> - Implement change management in organisations (e.g. in OT departments, private OT practices, participatory ergonomics in the 	Students develop, implement, document, evaluate, and present their own innovative, responsive project work. They demonstrate profound insight and awareness of institutional and personal

			workplace) [Hildesheim] - Be able to judge the development of financial-economic reports and their impact on the financial management of OT services [Belgium]	characteristics as relevant e.g. to change related processes.
12	Measurement	Critically appraise, select, improve, know how to develop	- Critically appraise, select, improve and apply measurement and clinimetrics [Belgium] - Contribute to the development of multidisciplinary or occupational therapy specific assessment guidelines [Belgium]	The assignment consists of writing a paper about possible assessment instruments to answer a certain occupational therapy-related research question. The student should critically appraise existing instruments and propose new instruments.
13	Occupational Therapy and Occupational Science concepts and applications	Gain/acquire knowledge, understand in-depth, evaluate, apply [on all levels: societal, public health,...], advocate, collaborate	- Analyse and discuss theories, models and concepts from occupational science [Innsbruck] - Make connections between occupational science and occupational therapy [Innsbruck] - Understanding of intra- and interdisciplinary theories and approaches to occupation, health and participation [Innsbruck]	The student writes a paper concerning an occupational science topic that has been discussed in the classes. The student is allowed to use all necessary means (articles, books,) to defend their rationale.
14	Policy development	Advocate, develop, communicate, review, influence	- Advise local policy strategies within the context of increasing impact of European (health care) at the national, European & global level [Belgium] - Advocate for an occupational	The student writes a paper concerning the application of health economic research methods with a focus on cost-benefit analysis of medical technologies.

			perspective in the development and implementation of policies and local, national or international strategies, oriented on health promotion [Lausanne]	
15	Promotion of an occupational perspective at micro-, meso- and macrolevel	Advocate, communicate, negotiate, influence	<ul style="list-style-type: none"> - Demonstrate a critical awareness of current problems and/or new insights at the forefront of promotion of activity and participation [York] - Have knowledge of political reasoning in occupational therapy and value meaningful occupation and participation in regard to human dignity, participation and occupational justice [Innsbruck] - Act on various occupational possibilities and occupational performance including defence of human needs or interests, health promotion and prevention [Lausanne] 	Paper to designate the added value of occupational therapy - without increasing costs - to improved healthcare. If possible insights are tested to the vision of a European, federal or Flemish policymaker.
16	Research	Research, develop, conduct, analyse, identify, critically approach, assess, measure	<ul style="list-style-type: none"> - Demonstrate a critical understanding of established and novel methodological approaches and techniques of research in a health and social care setting [York] - Able to write research applications [Hildesheim] - Undertake, present and discuss occupational science and 	<p>Report on a small qualitative study and a report on a small quantitative study.</p> <p>Over the course of two semesters: writing a research proposal (1), writing a report about a pilot project (2).</p> <p>Making a research plan, conducting the research and writing a Thesis.</p>

			<p>occupational therapy research projects [Innsbruck]</p> <ul style="list-style-type: none"> - Apply knowledge of descriptive and inferential statistics and basics of further statistical possibilities to reveal OT diagnostics, intervention, prognostic and risk & harm research [Lausanne] 	
17	Service & programme development and evaluation, and quality assurance	Act independently, reflect, research, evaluate, develop, identify, influence	<ul style="list-style-type: none"> - A systematic understanding of knowledge related to quality improvement and risk in health and social care contexts [York] - Evaluate, select and apply innovative analysis and approaches in relation to human occupation, everyday life and health including involvement of clients and health professional perspectives [Lausanne] - Have an insight into the fundamentals of quality-management and case-management [Innsbruck] - Collaborate with client groups to facilitate the development of initiatives that address their occupational needs [Innsbruck] 	The evaluation consists of writing and defending a paper. The student describes, based on own experience (of a given case report), a critical incident he/she was involved and in which there was a clear link to the organization of care. The critical incident is described and analysed using the concepts and insights from the course, A plan of action with concrete recommendations for improvement is developed.

Reactions and feedback from workshop participants over the course of 2 years

Overall, there was positive feedback from the workshop participants (university lecturers, Master and Bachelor students, Master graduates and practitioners; predominantly from Europe but also from North America) that the proposed areas cover the curriculum areas and learning outcomes of programmes they are involved with in Master education. They specifically mentioned the following uses of the framework:

- serving as a guideline for prospective students,
- promoting Master programmes by allowing the highlighting of individual strongpoints against the background of shared curriculum areas and competences,
- promoting Occupational Therapy by showing what Occupational Therapists can do.

The specific focus on Occupational Therapy (OT) was considered particularly important when working internationally.

One participant from the USA pointed out that, in her opinion, the shared curriculum areas and learning outcomes are **not only relevant for European** OT (post-registration) Master programmes. The accreditation body in the States (ACOTE) is considering to develop a similar framework as part of quality assurance of OT curricula.

Comments and questions from workshop participants drew attention to the following specific points:

- in individual programmes there are different emphases on the various shared curriculum areas;
- some explanation may be useful regarding the various meanings of “creativity” as a competence on the master level;
- the curriculum areas should reflect that professional roles of OTs need to be considered in Master’s education, e.g. the role of the practitioner as an educator;
- further work could evaluate the quality of individual master programmes;
- a master programme in rehabilitation mentions “co-creation” as a method, which may be worth exploring as a possible addition in further work of the group.

Reflections

The four year process of sharing experiences, analysing existing documents, exchanging thoughts, reflections, and further developing and précising ideas and wording as relevant to competence descriptions for Master graduates, has led to a frame of reference valuable not only for the participating partners, but also for programme developers engaged in Masters education, and for the internationalisation of Master curricula. The outcome could be a support for comparing educational programmes in their development. It may also contribute to fostering student and professorial mobility and in doing so, facilitate international experiences and dimensions. In that respect, the frame of reference was not developed with the idea of having standards but more the elaboration of a grid where Master programmes could refer and be able to locate their unique selling point and areas of cooperation with international partners and make this diversity accessible to individual students.

This exchange leading to the frame of reference was enriched by the diversity in terms of expertise and experiences of the contributing partners, the intra-professional as well as the inter-professional perspectives and the orientation on international guidelines and policies for Master education. However this variety also brought challenges in regards to taxonomy and incorporating the differences in terms of educational systems within the frame of reference. Even though the group was comprised of diverse contributing institutions, limits to the outcome could be found in the small number of participants in the workshops delivered at ENOTHE annual meetings and that the final product is mainly based on the curriculum and background of the contributing institutions. The workshops offered at the ENOTHE meeting in Nijmegen (project phase 1) attracted colleagues from international Masters programmes and led to vivid exchange and discussions related to the potential of internationalisation within Master education and to the accuracy and currency of Master Tuning reference points and their relevance and response to Health 2020.

Future perspectives

This set of curriculum areas and competences relevant for Master education as presented in this report can be further used by ENOTHE-members. This may support future reflections on professional competences of Master graduates. Revisions might be needed after a certain period, following international developments and guidelines relevant for health care professionals as well as for Master's programmes in general. They should be uploaded on the website of ENOTHE.

The World Federation of Occupational Therapists (WFOT) has been made aware of this project (June, 2014, WFOT Congress in Yokohama, Japan); they have stated their interest as they are currently preparing to address master's level competences. The results of this project can contribute to a world-wide tuning process led by WFOT, and might be integrated into minimum standards for master's education in occupational therapy. Meetings with WFOT president and representatives could be organised at the next WFOT Congress in Cape Town, South Africa.

The project group could propose further work to expand on the results like:

- Recording oral narratives (in youtube) of individual students' and graduates' experiences of a specific master's level programme to give individual examples of how the shared curriculum areas and Master competences create a specific professional profile, as an addition to the tables and database for ENOTHE,
- Workshops about benchmarking could be held at further ENOTHE meetings, in the form of a game between the different European master programmes,
- Creating a form to represent the areas as a landscape of what a Master programme covers; it could be used by prospective students to choose the master best fitting their education needs and interests, or an employer wanting to better know their future employee's competences,
- Adding credits weight to the different areas,
- Describing opportunities for exchange in a user-friendly way.

The project group is further involved in the writing of a manuscript that will continue after the submission of this present report.

Budget

Available budget 2015-2016	€ 5.000,00
Remaining budget 1 st project phase 2013-2015	€ 4.120,93
Total	€ 9.120,93

Spent budget

Meeting	Transport & accomodation	Logistics	Total
Innsbruck June 28-29 2015	€ 1.894,09	€ -	€ 1.894,09
Bulgaria, ENOTHE October 21, 2015	€ -	€ -	€ -
Leuven March 3-4, 2016	€ 1.589,54	€ 467,00	€ 2.056,54
Galway, ENOTHE-COTEC June 15, 2016	€ 3.806,90	€ 130,55	€ 3.937,45
Total spent	€ 7.290,53	€ 597,55	€ 7.888,08

References

American Occupation Therapy Association, Inc (wd). *Practice guidelines*. Available from: <http://www.aota.org/Practice/Researchers/practice-guidelines.aspx>[accessed 3.21.2017]

Bailey, DM, Schwartzberg, SL (1995). Ethical and legal dilemmas in Occupational Therapy. Philadelphia: F.A. Davis.

Bannigan K, Moores A (2009) A model of professional thinking: integrating reflective practice and evidence based practice, *Canadian Journal of Occupational Therapy*, 76 (5), 342-350. Available from: Bannigan K, Moores A (2009) A model of professional thinking: integrating reflective practice and evidence based practice, *Canadian Journal of Occupational Therapy*, 76 (5), 342-350. [accessed 3.3.2017]

Canadian Association of Occupational Therapists (CAOT), Association of Canadian Occupational Therapy University Programs (ACOTUP), Association of Canadian Occupational Therapy Regulatory Organizations (ACOTRO), & President's Advisory Committee (1999). Joint position statement on evidence-based occupational therapy. *The Canadian Journal of Occupational Therapy*, 66(5), 267-273.

CAOT (2007; 2012). Profile of Occupational Therapy Practice in Canada . CAOT Dawes, M., Summerskill, W., Glasziou, P., Cartabellotta, A., Martin, J., Hopayian, K., et al. (2005). *Sicily statement on evidence-based practice*. *BMC Medical Education*, 5. Available from: <http://bmcmmededuc.biomedcentral.com/articles/10.1186/1472-6920-5-1> [accessed 3.3.2017]

ENOTHE report master group project phase I (2015). http://enothe.eu/Wordpress%20Documents/Projects/ENOTHE%20Master%20GroupFinal%20report%2030_01_2015.pdf

European Commission.[internet] Descriptors defining levels in the European Qualifications Framework (EQF).[updated 2013; cited 22 September 2016]Available from: <http://ec.europa.eu/ploteus/en/content/descriptors-page>

European Network of Occupational Therapists in Higher Education (ENOTHE) (2014). Tuning and Quality: Tuning educational structures in Europe [2014; cited 22 September 2016] Available from: http://tuningacademy.org/wp-content/uploads/2014/02/RefOccupationalTherapy_EU_EN.pdf

Heard C P (2014) Choosing the Path of Leadership in Occupational Therapy. *Open Journal of Occupational Therapy*, 1 (2) 1-18. Available from: <http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1055&context=ojot> [accessed 3.3.2017]

Holmes, W.M, Scaffa, M (2009). An Exploratory Study of Competencies for Emerging Practise in Occupational Therapy. *Journal of Allied Health*, 38 (2), pp. 81-90

Houghton Mifflin Company (2004). The American heritage dictionary of the English language(4th). Retrieved September 2,2006 from <http://www.answers.com>

Laver Fawcett, A. (2007). Principles of assessment and outcome measurement for occupational therapists and physiotherapists - Theory, skills and application. West Sussex: John Wiley & Sons.

Mayring, P. (2000). Qualitative Content Analysis [28 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(2), Art. 20, Available from: <http://nbn-resolving.de/urn:nbn:de:0114-fqs0002204> [accessed 6 February 2017]

McClure, P., Developing entrepreneurial skills in occupational therapy students. *British Journal of Occupational Therapy* (2011), 74(11), pp. 499-499.

Robertson L, Griffiths S (2012) Problem Solving in Occupational Therapy. In Robertson L (Ed) *Clinical Reasoning in occupational Therapy: Controversies in Practice*. Available from: https://www.researchgate.net/publication/265350945_Problem_Solving_in_Occupational_Therapy [accessed 3.3.2017]

Scott, P (2011) *Universities are all 'internationalising' now*. The Guardian, 7 June 2011. Available: <https://www.theguardian.com/education/2011/jun/07/universities-global-ambitions-internationalising>

Torcivia EM, Gupta J (2008) Designing Learning Experiences that lead to Critical Thinking and Enhanced Clinical Reasoning. *OT Practice*, 13 (15), CE-1 – CE-8

World Federation of Occupational Therapists (WFOT, 2005). Code of ethics. www.wfot.org/ResourceCentre/tabid/132/did/34/Default.aspx [accessed 31.3.2017]

World Federation of Occupational Therapists (WFOT, 2012a) *Position Statement: Occupational Science*. Available from: <http://www.wfot.org/ResourceCentre.aspx> [accessed 3.3.2017]

World Federation of Occupational Therapists (WFOT, 2012b) *Position Statement: Specialisation and Advanced Occupational Therapy Competencies*. Available from: <http://www.wfot.org/ResourceCentre.aspx> [accessed 3.3.2017]

World Federation of Occupational Therapists (WFOT, 2012c) *Position Statement: International collaborative research in occupational therapy*. Available from: <http://www.wfot.org/ResourceCentre.aspx> [accessed 3.3.2017]

World Federation of Occupational Therapists (WFOT, 2012d). **Minimum Standards for the Education of Occupational Therapists 2016 - e-copy** <http://www.wfot.org/ResourceCentre.aspx>

World Health Organization (w.d.). National health policies. Available from:
<http://www.who.int/nationalpolicies/en/> [accessed 3.3.2017]