NetQues Project Report
Speech and Language Therapy Education in Europe
United in Diversity

Network for Tuning Standards and Quality of Education Programmes in Speech and Language Therapy/Logopaedics across Europe (NetQues): a multilateral academic and professional network

26 September 2013

Lifelong
Learning
Programme

Executive Summary

I   The project Network for Tuning Standards and Quality of Education Programmes in Speech and Language Therapy/Logopaedics across Europe (NetQues) is the work of a multilateral academic and professional network of 65 partners from 31 European countries. It is led by the Comité Permanent de Liaison des Orthophonistes / Logopèdes de l'Union Européenne (CPLOL), the Standing Liaison Committee of Speech and Language Therapists and Logopaedists.

II   Speech and language therapy (SLT) is globally recognised as an autonomous profession with legal regulation at national level in many countries. As the European Union (EU) has developed and increased in its membership, so also has the accompanying legislation to encourage cross border mobility and recognition of qualifications across member states. This has led to a need to be able to assess and analyse education programmes within the EU and beyond. This project sets out to establish agreements on areas of commonality in SLT education and also look at its differences. It delineates the agreed common core competences which are both essential and desirable for a newly qualified SLT to be able to practise the profession safely and effectively. The NetQues project has embraced the EU Tuning principles in looking for points of reference, convergence and common understanding, to serve as "a platform for developing reference points at subject area level"1.

III   Speech, language and communication disorders have been documented for many thousands of years. By the end of the nineteenth century there was, across Europe and beyond, a body of knowledge and a small number of practitioners who were involved in the study and remediation of disorders of speech. Since those early days, the speciality has developed into an independent academic scientific field. This is supported by the EU wide organisation, CPLOL.

IV   The discipline of SLT is concerned with human communication and swallowing, their processes, development and disorders and in particular the description, assessment and treatment of voice, speech, language and swallowing disorders. The SLT is the professional fully competent in the prevention, assessment, treatment and scientific study of human communication and related disorders.

V   SLT practice has changed over time as a result of changes in society and in thinking and advances in the related academic fields of medicine, psychology, linguistics, sociology and education. Demographics, diagnostics, technological advances, communications technology and sociological changes have influenced SLTs' scope of practice. This scope of practice has gradually extended, with changing priorities and focus within the differing EU countries.

VI   The NetQues project aims:
- to define academic and professional profiles of SLT across the EU

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[1] González, J. and Wagenaar, R. (2003). *Tuning educational structures in Europe*. Bilbao: University of Deusto. Retrieved 15-06-2013 http://www.relint.deusto.es/TUNINGProject/documentos/Tuning_phase1/ introduction page 1

- to describe the objectives of the pre-qualifying educational programme as well as the learning outcomes (in terms of knowledge, understanding and skills) that have to be met

- to identify the generic and subject specific competences which should be obtained in the programme.

VII   A total of 65 partners were recruited from all 27 EU countries, plus Liechtenstein, Norway and the EU-candidate countries of Iceland and Turkey. Partners were mainly from academic institutions but also included some professional associations. Project coordination was undertaken by the lead partner, CPLOL, which comprises expert clinicians and academics representing each European country. Partners were allocated to one of six work package (WP) teams, reflecting a range of expertise and geographical spread within each team. Targets which aligned with the Tuning process lines were then assigned to each of the WP teams. Each WP team took responsibility for one or more elements of the work, shared across the partners. An ethnographic research approach was adopted using the broad range of expert participants as key informants. In order to provide as complete an overview as possible of this diversity and map the current state of the art of SLT education, two Europe wide surveys were conducted. The surveys explored the diversity of the qualifications in SLT. Results gave profiling information and benchmarks for competences required by a new entrant to the SLT profession.

VIII   Profiles: Summary profiles encompassing data from both surveys show that all but two countries have at least one educational programme (and many have considerably more than one) leading to a professional qualification in SLT. SLT programmes in Europe are typically within universities, mainly state funded and predominantly organised in faculties with other health related programmes.

IX   Typically, the level of qualification that enables an SLT to practise is at least a bachelors degree, awarded after at least three years of initial education. A masters degree (European qualifications framework level 7) may be accomplished after a total of five years of higher education (three years bachelors and two years masters). Doctoral programmes on average take an additional three years. A progression from bachelors via masters to doctorate degree is possible in almost every EU country. Where used, normally 60 European Credit Transfer System (ECTS) credits are awarded per academic year.

X   Most established programmes are regulated by the state or the government. France reported the highest number of student SLTs. Belgium and the Netherlands have unexpectedly high numbers, possibly partly explained by their catchment area extending into Germany to meet the needs of neighbouring German students seeking to study a bachelors degree in SLT. However it should be noted that some of the figures given were estimates as many countries do not keep national statistics of students by subject of study.

XI   Programmes include a wide range of assessment types including written examinations, practical examination of skills and viva voce examinations. Reflective account of experience, portfolio of competences, clinical practice exams, video analysis and student self-assessment are also used. In addition to academic study, all programmes include supervised/mentored clinical practicum as a key component of the route to qualification and professional competence. Clinical competence is mainly evaluated by clinical supervisors. Methods for assessment of clinical competence may differ widely and include written assessment, viva voce assessment, observation and evaluation form, portfolio or case examples. Research projects carried out by students as part of the programme are required in almost two thirds of programmes studied.

XII   Competences: The education of SLTs demands achieving and being able to demonstrate competences which are a complex interaction of theory and practice together with a range of interaction skills necessary for effective evidence-based practice. A most striking feature of the overall results comparing the importance of the subject specific and generic competences needed in order to start to practise SLT was the extent of agreement between academics, graduates and employers.

XIII   With regard to subject specific competences, these are all related to effective assessment, diagnosis, treatment, prevention and counselling of clients and their significant others in the area of communication disorders and swallowing difficulties. Subject-specific competences most often cited as essential are related to six areas identified, namely Scope of practice, Assessment and identification of communication disorders and swallowing difficulties, Planning and implementation of intervention, Planning, maintaining and evaluating services, Prevention and Professional development, continuing education and specific ethical responsibilities.

XIV   With regard to generic competences, inter- and intra-personal competences were perceived as most crucial.

XV   Benchmarks: The set of competences essential for a newly qualified SLT which were most often cited across all key stakeholder groups are listed in Annex I. This document can be regarded as the EU-wide agreed common standards which every SLT must meet in order to practise the profession. These also provide benchmarks for SLT initial education and should be addressed in all European SLT education programmes. The expected competences which have been shown to be essential reflect a range of levels, the vast majority of which have been judged to culminate at levels 6 and 7 of the European Qualifications Framework2.

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[2] http://ec.europa.eu/education/policies/educ/eqf/eqf08_en.pdf

XVI SLT education across Europe is diverse, vibrant and constantly evolving. The profession finds itself at differing stages of development in different countries. However there is a commonality of purpose and profound commitment of SLTs and SLT educators to ensuring they produce the best graduates to provide the best practice and service to people who are in need of SLT professional help. This has shone through the entire period of the NetQues project. With this level of commitment, and expertise, the future of the profession and its service to people who can benefit from SLT is bright.

CHAPTER 7   Expected Competences Required by Newly Qualified Speech and Language Therapists

1   Introduction

Fostering competences is the object of educational programmes. As outlined in chapter 3, speech and language therapy (SLT) is a complex scientific discipline and field of practice. It is important that the range of learning outcomes for the new SLT are described in a way that covers the range of competences deemed necessary. It was also considered desirable by all experts consulted that they emphasise the integration of different competences in practice covering:

1. the technical competences expected with regards to how the SLT approaches his or her task
2. how the SLT uses knowledge and understanding with appropriate attitude and decision-making strategies
3. the on-going development of the individual as a person and as a professional.

Professional competence has often been described in terms of "doing the right things", "doing the right thing in the right way" and "the right person doing it" - see Harden's description of medical education (2002) [51,52] and Adam's (2006) [53] introduction to learning outcomes in the EUA Bologna Handbook.

In Tuning, competences are described as reference points for curriculum design and evaluation, not as straight-jackets. They allow flexibility and autonomy in the construction of curricula. At the same time, they provide a common language for describing what curricula are aiming at.

The Tuning methodology identifies competence in terms of **generic** competences or transferable skills, i.e. those abilities not confined to the learning or application of a specific subject and **subject specific** competences that are directly related to the discipline or subject, in this case SLT.

For this project focusing on SLT, project partners agreed that it is most expedient for the comparison of programmes to focus on what the SLT graduate, that is the newly qualified independent professional, must be able to do. Competence was recognised and defined in this context, as it is in others, to encompass not only being able to do something but to do so with understanding, flexibility, using higher order cognitive skills such as analysis and synthesis. It also encompasses being able to seek, select and appropriately use information, i.e. employing reflective critical thinking, as well as choosing the best action based on all evidence in the most appropriate way, for the best reasons. Professional competence thus encompasses a range of skills: knowledge - cognitive/intellectual, psychomotor/physical skill and, in the affective domain, attitudes, feelings and emotions.

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[51] Harden, R. M. (2002a). Developments in outcome-based education. *Medical Teacher*, 24(2), 117-120.
[52] Harden, R. M. (2002b). Learning outcomes and instructional objectives: is there a difference? *Medical Teacher*, 24(2), 151-155.
[53] Adam, S. (2006) An introduction to learning outcomes. In Froment E., Kohler J., Purser L. and Wilson L. (Eds), EUA Bologna Handbook article B.2.3-1. Berlin: Raabe.

Consequently, the project focuses on identifying those subject (profession) specific competences which are crucial in newly qualified[54] SLTs, as these serve to differentiate SLTs from other graduates and in particular graduates from other professions. Generic academic competences are also included, and are indeed required as a foundation for the development of the profession specific competences, but are examined separately from the subject specific ones.

Further, the results reported below separate out subject specific knowledge, skills and attitudes as identified by respondents to the surveys (see Annex IV), in order first to identify the competences considered core for new graduates and those considered desirable for effective and efficient SLT practice across the EU and second to identify the degree to which competences in these three domains (i.e. knowledge, skills and attitudes) are inter-related and lead to competence.

This project describes the specific integration of knowledge, understanding, subject specific skills and abilities used by the SLT to function according to the demands that are put upon him/her in the specific SLT context (health/education/social sector). NetQues goals with regards to the SLT perspective therefore complement and closely resemble the objectives of the EQF (see Table 7.1).

Table 7.1 Comparison of Objectives of EQF and NetQues

Objectives	
EQF	**NetQues**
• qualification more readable and understandable across different countries and systems in Europe • promote citizens' mobility between countries and to facilitate their lifelong learning • increase the transparency of qualification	• to agree on common standards and benchmarks for newly qualified SLTs • to facilitate greater mobility of qualified professionals across countries • to facilitate the development of the profession • to provide guidance to higher education institutions and main stakeholders regarding the education of SLTs in all countries of Europe • to enable European citizens to access the service of appropriate qualified SLTs

2   Method

As already described in Chapter 5, a team of experts in SLT education generated a set of subject specific and generic competences following an extensive review of existing documentation of education programmes, regulatory frameworks, reference points and benchmarking documents from across Europe, as well as SLT competence based

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[54] newly qualified = one who has successfully completed the SLT programme and is ready to work independently as a speech and language therapist

frameworks globally including documents used in USA (ASHA)[55], Australia (SPA)[56], Canada (CASLPA)[57] and the IALP guidelines[58]. These proposed items were piloted and refined iteratively using a modified Delphi technique, by involving wider groups of experts from colleagues in SLT education and clinical practice. This effort resulted in an agreed set of 60 subject specific and 38 generic competences (see Annex IV for survey items).

The subject specific competences were related to the following eight areas:

- scope of practice
- assessment and identification of communication and swallowing difficulties
- planning and implementation of intervention
- planning, maintaining and evaluating services
- prevention
- quality assurance
- research
- professional development, continuing education and specific ethical responsibilities.

The generic competences were related to the following three areas:

- instrumental competences
- interpersonal and intrapersonal competences
- systemic competences.

The total set of 98 competences formed the basis for a questionnaire (in English) which, together with a glossary, was sent to the lead partner in each country for arranging translation by SLTs competent in their own language and English. The survey and glossary were then prepared in all required European languages (24 in total) using back translations as checks. Finally, the online survey tool SurveyMonkey[59] was used for the completion by respondents in their preferred language.

The survey was sent out to three groups of key stakeholders in each country:

1. academic teachers/lecturers/researchers of SLT programmes

2. recent graduates (last five years) from SLT programmes

3. employers of SLTs (including health service managers).

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[55] ASHA (2009) *Standards and Implementation Procedures for the Certificate of Clinical Competence in Speech-Language Pathology Revised March 2009* American Speech-Language-Hearing Association Retrieved from: http://www.asha.org/certification/slp_standards/
[56] SPA (2010) Code of ethics. Retrieved from http://www.speechpathologyaustralia.org.au/library/CodeofEthics.pdf
[57] CASLPA (2008) *Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) Scope of Practice for Speech-Language Pathology*. Retrieved from: http://www.caslpa.ca/PDF/Scope_of%20Practice_SLP_english_2008.pdf
[58] IALP Guidelines for Initial Education in Speech Language Pathology. *Folia Phoniatrica et Logopaedica*. 2010, 62(5), 210-16.
[59] www.surveymonkey.com (Pro Gold version)

Respondents were asked to judge the competences as:

- not essential to be able to practise (work) *as a newly qualified SLT*

- desirable but not essential to be able to practise (work) *as a newly qualified SLT*

- essential to be able to practise (work) *as a newly qualified SLT.*

A newly qualified SLT was defined as 'one who has successfully completed the SLT programme and is ready to work independently as an SLT'.

The data, i.e. the responses to the survey, were analysed by Work Package Team 3 partners. The data analysis was generated using SAS software[60] and Excel[61] to provide descriptive statistics and also statistical analyses of results by respondent groups and characteristics.

3   Results and key findings

A total of 4383 responses were received by the closure of the SurveyMonkey link. Of the 4383 responses received 2863 (65%) were fully completed and used for analysis. The 1520 responses with missing data were rejected.

3.1   The most significant subject specific competences

The 25 subject specific competences most frequently cited as "essential" by all three respondent groups are listed in Table 7.2 overleaf.

It can be seen that those subject specific competences most often cited as essential are related to six of the eight areas identified above (see 7.2 above), namely

- scope of practice
- assessment and identification of communication disorders and swallowing difficulties
- planning and implementation of intervention
- planning, maintaining and evaluating services
- prevention
- professional development, continuing education and specific ethical responsibilities.

Respondents thus considered that initial education in SLT should particularly emphasise competences that relate to assessment, diagnosis, treatment, prevention and counselling in order to start to practise as an SLT.

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[60]SAS Version 9.3 (TS1M0) of the SAS System for Unix. Copyright © 2002-2010 by SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.
[61] EXCEL Microsoft for Windows/Mac

Table 7.1 The 25 subject specific competences most frequently cited as essential

	Most frequently cited as essential Subject Specific Competence Descriptors
1.	Can assess, diagnose and intervene in speech and language disorders
2.	Understands the professional roles and boundaries of a speech and language therapist
3.	When necessary, refers client to other professionals in a timely and appropriate manner
4.	Provides appropriate feedback on interpretation of assessment results to the client and significant others, in a way they can understand easily
5.	Implements appropriate therapy techniques using the necessary materials and instrumental equipment
6.	Can produce oral and written reports of assessment results, including analysis and interpretation of assessment information
7.	Integrates assessment results with other relevant information to set goals
8.	Observes the code of ethics of the national professional body and/or as prescribed by the employer and/or the national/state government
9.	Understands rationales and principles that underlie specific therapy methods
10.	Discusses long-term outcomes and decides, in consultation with the client, whether speech and language therapy is appropriate or required (includes key people in these discussions)
11.	Identifies gaps in information needed to understand the client's disorders and seeks information to fill those gaps
12.	Analyses and interprets assessment results accurately and integrates information from case history and other relevant sources into findings
13.	Makes reasoned decisions to initiate, continue, modify or cease the use of chosen techniques, treatments or procedures and records the decisions and reasoning appropriately
14.	Selects and plans appropriate and effective therapy interventions involving key people in the client's environment
15.	Establishes rapport and facilitates participation in the assessment and differential diagnosis process
16.	Prepares a client for discharge from therapy appropriately, agreeing a point of closure with the client and significant others and follows relevant agency discharge procedures
17.	Documents response to intervention and any changes in intervention plan
18.	Contributes to the prevention of the occurrence or the development of communication, eating, drinking or swallowing difficulties by early intervention in disorders
19.	Identifies the influence of different situations, environments or contexts on clients' problems
20.	Develops personal growth as a speech language therapist through insight into, and further development of, a range of interpersonal and communication skills
21.	Recognises the effect of the disorders on the psychosocial well-being, social and medical status of the client and significant others
22.	Collects information, including qualitative and quantitative data, to evaluate the effectiveness of therapy
23.	Understands the roles of other members of the inter-/trans-disciplinary team and produces intervention plans in consultation with them
24.	Keeps legible and accurate contemporaneous records in accordance with professional and legal requirements and uses only accepted terminology
25.	Understands the concepts of efficacy and efficiency in relation to SLT intervention

3.2 Common features across stakeholders

Academics, graduates and employers expressed very similar preferences concerning the majority of their top five out of the 60 rated subject specific competences. Despite the high number of possible choices of competences, there was a considerable level of agreement concerning the competences perceived to be essential or desirable. Table 7.3 below shows the five competences most frequently cited as essential by 206 employers, 476 academic staff and 2181 graduates who completed their initial education within the past five years.

Table 7.2 The five subject specific competences most frequently cited as essential in each of the three stakeholder groups

Most cited subject specific competences by stakeholders		
Employers	**Academics**	**Graduates**
1. Can assess, diagnose and intervene in speech and language disorders	1. Can assess, diagnose and intervene in speech and language disorders	1. Can assess, diagnose and intervene in speech and language disorders
2. Understands the professional roles and boundaries of a speech and language therapist	2. Provides appropriate feedback on interpretation of assessment results to the client and significant others, in a way they can understand easily	2. Understands the professional roles and boundaries of a speech and language therapist
3. Provides appropriate feedback on interpretation of assessment results to the client and significant others, in a way they can understand easily	3. Can produce oral and written reports of assessment results, including analysis and interpretation of assessment information	3. When necessary, refers client to other professionals in a timely and appropriate manner
4. Implements appropriate therapy techniques using the necessary materials and instrumental equipment	4. Understands the professional roles and boundaries of a speech and language therapist	4. Provides appropriate feedback on interpretation of assessment results to the client and significant others, in a way they can understand easily
5. When necessary, refers client to other professionals in a timely and appropriate manner	5. When necessary, refers client to other professionals in a timely and appropriate manner	5. Implements appropriate therapy techniques using the necessary materials and instrumental equipment

3.3 The least significant subject specific competences

The ten subject specific competences that were least often cited as essential for being able to start to practice as an SLT are shown in Table 7.4 overleaf.

Table 7.3 The ten subject specific competences least frequently cited as essential for a newly qualified SLT by the total number of respondents (least =1)

	Least often cited as essential Subject Specific Competence Descriptor
1.	Can administer, record and interpret the instrumental measurement of nasometry/stroboscopy/nasendoscopy/laryngography/videofluorouscopy/tympanometry/acoustical analysis
2.	Contributes to the development of the discipline and of the profession by undertaking and publishing research and case studies
3.	Is familiar with statistical packages
4.	Collaborates in research initiated or supported by others
5.	Can administer, record and interpret the instrumental measurement of audiometry
6.	Makes suggestions for developing or acquiring new resources, or introducing new methods
7.	Evaluates formal and informal assessment tools and intervention resources and methods in relation to current research
8.	Once experienced and preferably trained, assists and tutors students of the profession
9.	Contributes to the prevention of the occurrence or the development of communication, eating, drinking or swallowing disorders by education of the public and other professionals
10.	Contributes to the generation of data for quality assurance programmes

Obviously these competences require post qualifying experience in the field of SLT and are therefore not cited as essential for a newly qualified SLT.

3.4 The most significant generic competences

The 25 generic competences most frequently rated as "essential" by all three respondent groups are shown in Table 7.5 overleaf.

Considering all the 38 generic competences, all items in the area of interpersonal and intrapersonal competences included in the survey were among the 25 that were most often cited as essential by all categories of respondents. Among the ten generic competences most often cited as essential are those related to intrapersonal competences such as the *demonstration of a behaviour which is honest, sincere and reliable*, as well as the *ability to be self-critical and to reflect on one's own performance*. Interpersonal skills most often cited were the *ability to provide accurate feedback in a comprehensible and sensitive manner* and to *empathise with clients and colleagues*, followed by systemic competences and instrumental competences, which were in general considered as less important.

To sum up, the results demonstrate that inter- and intra-personal generic competences were perceived as most crucial. Therefore, these generic competences should be

carefully promoted within the initial education in order to enable SLTs to practise. Following these personal competences, which are definitely highly relevant, mainly instrumental competences appear to be perceived as essential.

Table 7.4 The 25 generic competences most frequently cited as essential by the total number of respondents

	25 most frequently cited essential Generic Competence Descriptor
1.	Demonstrates behaviour which is honest, sincere and reliable
2.	Demonstrates the ability to be self-critical and reflects on their own performance
3.	Provides accurate feedback in a comprehensible and sensitive manner
4.	Empathises with clients and colleagues
5.	Takes responsibility for developing their own knowledge and skills throughout their lifespan
6.	Demonstrates positive attitude and proactiveness
7.	Is able to extract information from informants efficiently and sympathetically
8.	Uses appropriate, effective skills and materials in written, oral and visual communication of information and instruction
9.	Adapts own behaviour and approach to fit new situations
10.	Identifies the important factor in a problem and suggests possible solutions
11.	Expresses the preferred solution/decision in a comprehensible way and outlines the concrete actions required
12.	Appreciates diversity and multiculturalism
13.	Uses knowledge, such as identification of the important factors in a problem, its possible solutions and risks associated with each, to select the most appropriate solution for the particular circumstances
14.	Demonstrates resilience in coping with the demands of the profession in a way which enables them to maintain self-esteem and manage stress
15.	Demonstrates social skills such as assertiveness, cooperation, negotiation
16.	Analyses information to draw appropriate conclusions and recognises the implications of these conclusions
17.	Synthesises information from diverse sources to select an appropriate course of action or to answer a question
18.	Applies legal and ethical principles in managing information and protects integrity, reliability and authenticity of records
19.	Identifies the risks or pitfalls associated with each possible solution
20.	Divides tasks into concrete steps and sets time schedules with realistic aims, taking into account all other demands
21.	Works independently
22.	Meets goals or delivers products of work on schedule
23.	Conducts a search of the scientific literature to find the most relevant information to answer a question
24.	Formulates creative and original solutions for novel situation
25.	Gathers data using various methods including literature review, interviewing, questionnaires and observation

3.5   Common features across stakeholders

As in the judgement of subject specific competences, academics, graduates and employers again expressed very similar preferences concerning the majority of their top five out of 38 rated generic competences. There was thus a considerable level of agreement concerning the generic competences perceived to be most important. Table 7.6 below shows the top five results from 206 employers, 476 academic staff and 2181 graduates, who completed their initial education within the past five years.

Table 7.5 The five generic competences most frequently cited as essential in each of the three stakeholder groups

Most cited generic competences by stakeholders		
Employers	**Academics**	**Graduates**
1. Demonstrates behaviour which is honest, sincere and reliable	1. Provides accurate feedback in a comprehensible and sensitive manner	1. Demonstrates behaviour which is honest, sincere and reliable
2. Provides accurate feedback in a comprehensible and sensitive manner	2. Demonstrates behaviour which is honest, sincere and reliable	2. Demonstrates the ability to be self-critical and reflect on their own performance
3. Empathises with clients and colleagues	3. Demonstrates the ability to be self-critical and reflect on their own performance	3. Empathises with clients and colleagues
4. Takes responsibility for developing their own knowledge and skills throughout their lifespan	4. Empathises with clients and colleagues	4. Provides accurate feedback in a comprehensible and sensitive manner
5. Demonstrates the ability to be self-critical and reflect on their own performance	5. Uses appropriate, effective skills and materials in written, oral and visual communication of information and instruction	5. Takes responsibility for developing their own knowledge and skills throughout their lifespan

3.6   The least significant generic competences

The ten generic competences which were least often cited as essential in order to be able to start to practise as an SLT are listed in Table 7.7 overleaf.

Systemic competences are more often considered as desirable or not essential. That is, eight out of ten competences which were considered as not essential are systemic competences. It is clear that being *able to write professional documents, scientific articles and make professional presentations in a foreign language* (which generally means publishing research) would not typically be judged as a requirement for starting to practise as an SLT, though may well become more necessary as the SLT's career progresses.

The finding that being *able to read and comprehend professional documents, scientific articles and professional presentations in a foreign language*, and *use of a foreign language* are two of the generic competences least often cited as essential or desirable,

may be due to the reality that most of the profession's scientific literature is written in English and that likewise the stakeholders in English-speaking countries (or even where it is widely used) find it less essential to specify that a newly qualified SLT is able to comprehend or express himself or herself in a foreign language.

Table 7.6 The ten generic competences least frequently cited as essential by the total number of respondents

	Least often cited as essential Generic Competence Descriptors
1.	Is able to write professional documents, scientific articles and make professional presentations in a foreign language
2.	Design and implement a research project to answer a particular question effectively
3.	Direct others as appropriate
4.	Manage others to achieve consensus
5.	Educate new entrants and other members of the team
6.	Use e-learning applications and adapt to new educational technologies
7.	Is able to read and comprehend professional documents, scientific articles and professional presentations in a foreign language
8.	Engage in new enterprise or follow a difficult course of action, if required
9.	Provide appropriate education and training for members of other professions or significant others involved with their clients
10.	Evaluate the methodology, results and analyses of reported research projects to judge their worth

4   Discussion and implications of findings

It is clearly evident that subject specific competences related to the assessment, diagnosis, treatment, prevention and counselling in the area of communication disorders and swallowing difficulties are crucial and should be emphasised in initial SLT education. Academics, graduates and employers showed a high degree of agreement that the overarching competence *can assess, diagnose and intervene in speech and language disorders* is essential in order to be able to start to practise as a newly qualified SLT. While there was strong agreement across the specific competences required there was also some variation between the different groups' priorities across the 60 subject specific competences. For example academic staff placed slightly more emphasis on items such as *can produce oral and written reports of assessment results, including analysis and interpretation of assessment information*, whereas graduates and employers more frequently cited *understands the professional roles and boundaries of an SLT.*

Regarding generic competences, inter- and intra-personal competences are most frequently considered essential for initial SLT education and thus should carefully be promoted within the initial education. Instrumental competences are considered either essential or desirable, while systemic competences linked to management and research are considered at best desirable but not essential for the newly qualified SLT. The generic competence that was most frequently cited as essential for a newly qualified SLT among graduates, employers, and academic staff was *demonstrates behaviour which is honest, sincere and reliable.* Academics cited the ability to *provide accurate feedback in*

a comprehensible and sensitive manner first, compared with second by employers and fourth by graduates.

Similarly, the generic competence *empathy with clients and colleagues* was equally frequently cited as essential by graduates and employers (third), slightly less frequently (fourth) by academics.

There is also some other variations across the groups. Employers and graduates cite the competence of *taking responsibility for developing their own knowledge and skills throughout their lifespan* as essential for starting to work as an SLT more often than academics. Academics more often cited *uses appropriate, effective skills and materials in written, oral and visual communication and instruction* than employers and graduates. This variation may well reflect the perceptions of each category of respondents of the relative importance of when these key generic competences must be demonstrated in the SLT's development.

Differences can also be attributed to differing expectations of the relative importance of certain or emerging competences, for example those related to research activity. Expectations are that the new SLT graduate should be able to demonstrate some competence in this area – but the level of this may vary. Expectations may also reflect the entry level and type of programme(s) available in that country. From the departmental survey it was evident that the relative amounts of time and depth of study of research methods across programmes vary considerably. As might be expected, the academic respondents put more emphasis on the knowledge base (underpinning competence), whereas employers seem more concerned with the skills demonstrated by SLTs.

5   Conclusions

5.1   Theory and practice

The education of SLTs demands achieving and being able to demonstrate competences which are a complex interaction of theory and practice together with a range of interaction skills necessary for effective evidence-based practice. The nature of the profession and the science of SLT demand an initial SLT education programme that enables those who successfully complete it to have achieved a series of subject specific and generic competences that will allow them to practise safely and effectively in their profession. A most striking (and indeed reassuring) feature of the overall results comparing the importance of the subject specific and generic competences needed in order to start to practise SLT, was the extent of agreement between academics, graduates and employers.

Subject specific competences are all related to effective assessment, diagnosis, treatment, prevention and counselling of clients and their significant others in the area of communication disorders and swallowing difficulties. The generic competences particularly relevant for the newly qualified SLT are related to inter- and intra-personal competences. Attitudinal and people oriented skills such as empathy and understanding are essential for being effective in therapeutic relationships with clients and colleagues,

for gathering client data and in making appropriate client and evidence based clinical judgement.

5.2 Learning in, on and through clinical placement

Supervised and mentored clinical placements are crucial in providing the environment in which the student SLT can learn, practise and develop the necessary competences to become a qualified professional. The quality and timing of placements should be carefully planned to allow the student SLT to build up the necessary expertise with reflection and understanding of the complexity of good clinical decision making based on gathering and weighing up the evidence in each situation. Thus we have also seen from the manner in which SLT professional programmes are designed across Europe and internationally (see chapter 6) that an integrated curriculum which incorporates clinical learning in the real world situation throughout is the norm. While the amounts of in-house and work based learning may vary considerably there is universal agreement that it is an essential factor and must be carefully structured into the learning process.

5.3 Benchmarks for SLT education: European standards to practise SLT

The set of competences essential for a newly qualified SLT which were most often cited across all key stakeholder groups are listed in Annex I. This document can be regarded as the EU-wide agreed common standards which every SLT must meet in order to practise the profession. These also provide benchmarks for SLT initial education and should be addressed in all European SLT education programmes.

5.4 Fitness for practice, fitness for purpose and fitness for the future

Having demonstrated threshold competences and qualified, the new practitioner achieves the status of being ready for independent practice. However lifelong learning and professional development will still be crucial to further development and maintenance of currency and appropriateness of all that an SLT does in practice. This must be fostered throughout the career and in the early years post qualification the SLT will benefit greatly from a supportive work environment with mentoring to allow this to happen. As has been referred to above SLT is an ever-evolving, dynamic profession which needs to adapt to meet changing needs of society and incorporate new scientific and technological advances, therefore continuing professional development is essential for the qualified SLT professional to go on being fit for purpose and fit to practise. Likewise the set of threshold competences required at point of entry to the profession should not be seen as timeless but should be reviewed and updated regularly through robust processes, to reflect developments in education and in the profession.