#### COMMUNICATION SCIENCE WITHIN EDUCATION FOR LOGOPEDICS/SPEECH AND LANGUAGE THERAPY IN EUROPE: THE STATE OF THE ART

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## ABSTRACT

The paper presents the main issues from the working group on on Speech and Language (SLT) within the SOCRATES/ Therapy ERASMUS Thematic Network "Speech Communication Science". SLT is today a profession which has undergone a dramatic evolution in recent decades, as developments in clinical skills have been integrated with an increasingly high level of academic and research expertise. The short term aim of the working group has therefore been to evaluate current practice in education in communication science for speech and throughout language therapists Europe. Α questionnaire was designed with the aim of eliciting some factual information about speech communication science education for SLT, as well as attitudes about the role of this area within the broader context of SLT education. Responses were received from institutions representing eight countries, but the response rate has so far been very poor. This has reinforced the aim of developing internet connections, both within the profession and as an interface with other related disciplines. A web site, developed and supported at Lund University, provides basic information about all SLT education courses within Europe.

The working group has also decided to adopt a new strategy for the second year's work within the Network. Data will be collected and summerized in a multilingual style through the selection of a responsible persons from each European country. There will be a report of these activities in the beginning of January 1998.

## **1. INTRODUCTION**

This paper is a presentation from the working group on Speech and Language Therapy within the SOCRATES/ERASMUS Thematic Network "Speech Communication Science". Before reporting on the first year of activity, it may be useful to look at the broader context and motivation of this group.

Logopedics/Speech and Language Therapy (SLT) is a multi-disciplinary profession which synthesises knowledge drawn from a variety of related disciplines. These include medical and biological sciences, behavioural science, phonetics and linguistics and speech technology as well as the specialist area of speech and language pathology and therapeutics. It is a profession which has undergone a dramatic evolution in recent decades, as developments in clinical skills have been integrated with an increasingly high level of academic and research expertise. There are now also several scientific journals available for S&LT publications in both general and specific topics in speech and language pathology and therapy [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15]. It is. however, a profession in which the evolutionary pattern has varied considerably from country to country, and this is reflected in continuing variations in the education and professional organisation of therapists across Europe and the world.

There have been some initiatives aimed at developing international standards in both education and professional practice of speech and language therapy. The International Association of Logopedics and Phoniatrics (IALP) has been influential in the development of world-wide guidelines for professional and educational standards, whilst the Comité Permanent de Liaision Orthophonistes-Logopedes (CPLOL) des has looked in detail at the professional profile within Europe. Both of these bodies have tried to take a holistic view of the profession, but there is also an argument for taking a much more focused view of SLT. specific subject areas relating to Communication science, encompassing phonetics, linguistics and spoken language engineering, underpins much of the theoretical and practical work of the profession. Given that recent changes

in SLT have been paralelled by rapid developments in speech sciences (facilitated by advances in computing capability), it seems an opportune moment for a collaborative project aimed at stimulating education in this area. A British network (NETPhon) has addressed some relevant issues within the United Kingdom, but not within a European or world-wide context.

The short term aim of this working group has therefore been to evaluate current practice in education in communication science for speech and language therapists throughout Europe and beyond. Given the increased size of the profession, with 169 institutions within Europe offering SLT educational courses, collection of this information is a major task, but it is important in supporting a longer term aim of encouraging best educational practice. Acheiving this longer term aim will involve a variety of collaborative activities, including the development of networked resources.

# 2. ACTIVITIES OF THE WORKING GROUP

# **2.1.** Collation of Existing Information

A survey of existing information sources indicated a range of useful material, which has been collated. Significant sources include information on professional profiles, education and working practices within Europe, gathered by CPLOL [16], and international guidelines for initial education in SLT which have been formulated by IALP (17). IALP also provides a list of all educational establishments involved in SLT (18). A series of reports on specific aspects of phonetics education (a survey of current practice, assessment, teaching materials and guidelines for good practice) has been produced by NETPhon (19), but this includes data only for Britain. A library of course documents and national guidelines is being developed, but it is clear that there is still a need for a more comprehensive and up to date survey of current practice in the teaching of speech communication science for SLT.

## **2.2.** Collection of New Information

A questionnaire was designed with the aim of eliciting some factual information about speech communication science education for SLT, as well as attitudes about the role of this area within the broader context of SLT education. Questions probed a variety of issues, including:

- the rationale for including speech communication science within the SLT curriculum,
- knowledge and skills felt to be neccessary for effective practice,
- perceptions about adequacy of courses in this area,
- resources available (e.g. staff, instrumentation),
- balance between phonetic theory, skills in perceptual analysis and performance, physical and acoustic theory, use of instrumentation,
- approaches to integration of speech communication science with other areas of the curriculum,
- provision of continuing education,
- most significant publications used.

An additional aim of the questionnaire was to develop a web site giving information about SLT education within Europe. Some basic information about each course was therefore requested, with an invitation to allow this information to be added to the working group's web site.

This questionnaire was mailed to SLT course leaders in 169 institutions within Europe. Responses were received from institutions representing eight countries, but the response rate has so far been very poor. It is interesting to speculate on the reasons for the limited response. It is true that responding to questionnaires very often comes low in the order of priorities, but there may have been some additional factors involved. One problem may have been the inclusion of a section relating to internet communication. Since many SLT education institutions still have no access to the internet, this may have had a negative influence on some recipients. Similarly, institutions with minimal input in communication sciences may have doubted the relevance of the questionnaire to them.

A revised set of strategies for data collection has now been initiated, using personal visits, individual e-mail or telephone contact. The questionnaire will be modified to make it easier to interpret, and the motivation and benefits of the working group will be stated more explicitly. It is anticipated that a more complete evaluation of current practice will thus be available within a few months.

## 2.3. Development of Internet Connections

For a profession concerned with communication, the difficulties encountered in contacting relevant departments and in collecting information highlight some worrying gaps in the communication network within Europe. This has reinforced the aim of developing internet connections, both within the profession and as an interface with other related disciplines.

A web site, developed and supported at Lund University, provides basic information about all SLT education courses within Europe. The site (illustrated in Figure 1) can provide home pages for any SLT departments which do not have this facility, and links to existing home pages of departments which already have them. This web site is being developed with the support of IALP; this collaboration facilitates links to SLT web-sites outside Europe (e.g. USA, Japan, Africa).

# 3. DISCUSSION AND FUTURE DIRECTIONS

The working group has already been successful in forging links between SLT education courses, in synthesising information about the current status of communication science within SLT and in developing internet connections which provide an infra-structure for collaborative development of good practice in SLT education. It is still important that more is done to encourage a real dialogue between the disciplines of SLT, phonetics and speech technology. This is essential for optimum development of all three areas. SLT demands detailed knowledge of normal speech production and perception, and so does depend on access to the latest developments in phonetics and speech technology, but these disciplines may also benefit from collaboration with SLT. For example, research within SLT offers valuable insights into the nature of communication breakdown, which has important theoretical implications for phonetic models of normal speech production and perception.

SLT has made great progress in developing as a mature and independent academic discipline with a secure scientific research base, but independence must not be won at the cost of isolation. Countries in which SLT has been able to develop a stronger academic tradition have a responsibility to encourage and support SLT education in those countries with fewer resources, whilst still continuing their own development, fostering undergraduate, postgraduate and continuing education and encouraging the SLTs to develop specialist skills in phonetics and speech technology.

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Figure 1. The structure of the proposed Website for the SLT programmes in Europe.

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