NETPhon: Network for Education and Training in Phonetics

Report on Working Party: Guidelines for Good Practice

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Guidelines for Good Practice in the Teaching of Phonetics within the Education of Speech and Language Therapists (SLTs)

INTRODUCTION

The motivation for the development of these guidelines comes from a recognition that although phonetics is accepted as being pivotal to Speech and Language Therapy practice, there is little guidance for departments when developing and reviewing the teaching of this area. This document is one outcome from a series of workshops which brought together the expertise and experiences of people throughout Britain who are involved in the education and employment of Speech and Language Therapists. The proposed guidelines for good practice are not intended to be prescriptive, as it is recognised that each institution will offer a different learning and research environment, reflecting differing areas of expertise, resources and philosophies. Although the guidelines do outline some minimum goals in terms of theoretical understanding and practical skills which are seen as prerequisites for clinical competence, these should not be limiting. They may be approached in many ways within the broader context of education in phonetics and other aspects of speech and language therapy.

A. UNDERGRADUATE EDUCATION IN PHONETICS

1. Aims of phonetics teaching within the education of Speech and Language Therapists

Phonetics skills and knowledge are seen as being central to the professional practice of Speech and Language Therapy. Speech and Language Therapists should have a broad education in Phonetics which engenders the following:

Theoretical understanding of:

- the mechanisms of speech production, transmission and perception

- the relationships between aspects of speech production, acoustic measurement and perception.

- the principles of phonetic classification

- variation in phonetic output relating to aspects such as gender, age, accent, style

- the phonetic consequences of disorders of speech production and perception.

- the relationship between phonetic and phonological aspects of spoken language.

Practical skills in:

- perceptual phonetic analysis and segmental transcription of colloquial varieties of the target language and of disordered speech

- analysis and representation where appropriate of prosody, voice quality and coarticulatory processes.

- physical measurement (acoustic and/or physiological) and its interpretation

- manipulation of phonetic performance in a controlled and informed manner

An appreciation of the value and limitations of each of the above forms of analysis and an understanding of their relationships.

An ability to integrate phonetic knowledge and skills within the areas of linguistics, speech and language pathology and clinical practice.

2. Teaching Staff

2.1 Qualifications

Phonetics teaching staff should have specialist knowledge and skills appropriate to the broad goals outlined above and the curriculum covered. They should normally also have some interest and experience in the application of phonetics to Speech and Language Pathology. Some aspects of phonetics education may take place as part of modules in adjacent subject areas (e.g. audiology, neurology, psychology, linguistics, speech pathology) and a range of staff with different areas of expertise may be involved in the teaching. Active efforts should be made through activities such as team teaching or planning of modules to co-ordinate and integrate the various topics of phonetics with each other and with related subject areas.

2.2 Staff complement

Past experience has shown that small-group teaching is most successful in the development of skills in perceptual analysis, phonetic performance and the use of technology in the physical analysis of speech. It is strongly recommended that the complement of phonetics teaching staff should allow for a significant proportion of course delivery to involve small groups. This is expensive in staff time, but justifiable given that the development of these skills is central to clinical practice.

Although new developments in self-learning materials and technology may decrease the need for staff-student contact to some extent, these cannot replicate the experience of direct demonstrations and guidance by skilled phonetics teachers and it seems likely that there will continue to be a need for a high level of direct staff involvement.

3. Curriculum

Detailed design of the phonetics curriculum will reflect individual interests and strengths of each course team, but professional demands require that a core of essential subject areas should be covered, reflecting the aims listed in section 1., above. All courses should include

a core of essential topics within a curriculum of sufficient breadth and depth that it fosters the development of a strong theoretical base allied with an analytical approach to speech assessment and remediation. A list of essential topics which should be included within all courses for Speech and Language Therapists is under discussion, and a preliminary discussion document is attached as an Appendix. Further work in this area will also seek to clarify the position of phonology within the curriculum.

4. Teaching methods

Effective phonetics teaching may utilise a wide range of teaching methods. Traditional methods which are well established include:
- small group sessions for phonetic performance and ear-training
- lectures and seminars
- laboratory practicals
- the use of prepared audio- and video-tapes either as self-learning aids or in class.

More recent developments in interactive computer programmes for the teaching of acoustics and perceptual analysis, and the potential for widespread access to these through local and national networks, may have a major impact on teaching methods, and could enhance student self-learning quite significantly. The efficacy of many innovative methods of teaching remains unproven, however, and it may not be advantageous for phonetics teaching to rely too heavily on such tools. They may be best seen as valuable supplements to traditional face-to-face teaching rather than as substitutes for it.

Any or all of these teaching methods may have a place in phonetics teaching, and the choice of teaching methods may be influenced by such factors as curricular emphasis, availability of instrumental and other resources or staff expertise and preference. In general, the range of teaching methods chosen should encourage independent learning, problem solving and the development of practical skills allied with a firm theoretical understanding. There is a need for careful monitoring and evaluation of both new and established teaching methods.

5. Integration

The ability to apply phonetic expertise effectively within a clinical setting requires an ability to integrate phonetic knowledge with other areas of knowledge (linguistics, psychology, speech pathology). Phonetics courses should be designed so as to actively encourage such integration (see also section 2.1).

6. Assessment

In line with the healthy variety in teaching methods and curricular focus, a wide range of assessment techniques is available. The range of assessment procedures used within any course should be related to the key learning outcomes (see section 1). Assessments should encourage the ability to apply theoretical principles and practical skills to a wide variety of English, non-English and disordered speech data within a range of contexts.

B. POST-QUALIFICATION EDUCATION IN PHONETICS FOR SPEECH AND LANGUAGE THERAPISTS

The rapid and continuing growth of knowledge in the area of speech and language pathology and therapeutics, together with technological advances, has caused an expansion in all areas of the curriculum, including phonetics. It may no longer be realistic to expect, for example, that all aspects of instrumental phonetic analysis which may be used clinically can be adequately covered during undergraduate courses. As the use of technology for assessment and therapy of speech disorder continues to expand, it may be increasingly necessary to offer specialist post-qualification courses in some aspects of phonetics. These could either be tailored to the demands of particular client groups, as part of the route to specialisation in that client group, or they could be more general advanced level courses in phonetics. In this way, as part of the general trend to recognise specialist expertise, some therapists and phoneticians could be more openly encouraged to develop specialist clinical skills in phonetics, allowing them to perform a valuable role within the profession as recognised "Specialist Advisers in Phonetics".

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APPENDIX

CURRICULUM: PRELIMINARY DISCUSSION DOCUMENT

The intention is that a core of essential topics for Speech and Language Therapy students will be made explicit, and that a supplementary list of recommended topic areas will also be developed. The following list of essential topics is a preliminary proposal, which will serve as a basis for future discussion and development.

Essential topics

- the domain of phonetics and its context within linguistics, with particular emphasis on its relationship with phonology
- anatomy and physiology of the speech production process
- speech perception
- speech transmission (acoustics etc.)
- principles of phonetic analysis
- principles of phonetic transcription; recognition of the value and limitation of symbol systems, e.g. IPA, PRDS, extIPA
- recognition and performance of the range of vowels and consonants represented by the IPA
- recognition of the range of sounds represented by the extIPA set of symbols
- connected speech processes; awareness of differences between citation forms and pronunciation of words in various styles of connected speech
- phonetic transcription of a variety of accent and language types and of a variety of types of disordered speech
- approaches to phonetic analysis of prosody and voice quality
- approaches to acoustic analysis, and the clinical applications of acoustic data
- approaches to physical measurement of speech production, and the clinical applications of such data

It is clear that some of these topics may be taught as part of courses other than phonetics For example some aspects of speech production may be taught as part of anatomy and physiology courses, some aspects of speech perception may come under psychology, etc.. Their inclusion here as part of the “phonetics” curriculum reflects a belief that they are necessary for a proper understanding of phonetic theory, but the placement of these topics within “phonetics” or other courses is immaterial, as long as integration between subjects is actively fostered.