

## Abstract

Knowledge mobilisation is a growth industry though still emergent for educational audiology. This poster investigates the use of MESH (Mapping Educational Specialist knowHow) Guides to support evidence-based audiology both in clinic and in education. MESHGuides are 'a sustainable system using resources already available in education' (MESH, 2015). Findings from the literature revealed an evidence base for educational audiology, but without yet having significant knowledge management vehicles available such as exist in other disciplines. Focus group findings were generally positive though cautious in their view toward engaging MESHGuides. The case study presents the development of one MESHGuide (Acoustics, Listening and Learning). A significant opportunity exists for educational audiology as a discipline to move forward in access to evidence-based practice in the vehicle of MESH (www.meshguides.org).

## Introduction

Of particular interest to clinical audiologists given current movements in the field (e.g., FM for babies, dynamic integrated FM receivers), the Acoustics MESHGuide offers insight into real-life listening situation. This poster reviews pertinent literature to MESHGuide development and dissemination including methodology, followed by a discussion of findings, and conclusions. Nearly every sector of professional and commercial life views management of related knowledge as an imperative (Nutley, 2003). Fields such as medicine have had robust systems in place for decades (e.g., PubMed). Other fields, such as educational audiology, are further behind. Evidence exists for educationalists' desire and difficulties in accessing research relevant to practice (Leask, 2011). MESHGuides and their innovators aspire to be to education (including audiology) what NICE guidelines (2015) are to clinical practitioners -- a means of translational research for the busy practitioner to help readily develop evidence-based practice. They are embryonic at present; and the first one related to audiology and education is featured in the case study. Sintek (2001) in his book title 'Start with Why', proposes that asking why should be the starting point of any worthwhile to attract significant uptake. This rationale resonates with training Educational Audiologists for whom access to current translational research is essential, and with MESHGuides development aim of 'supporting professional judgment with evidence from the science of learning' MESH (2015). Together they imply that Nutley's imperative (2003) applies to any professional who works to improve outcomes children and young people who are deaf.

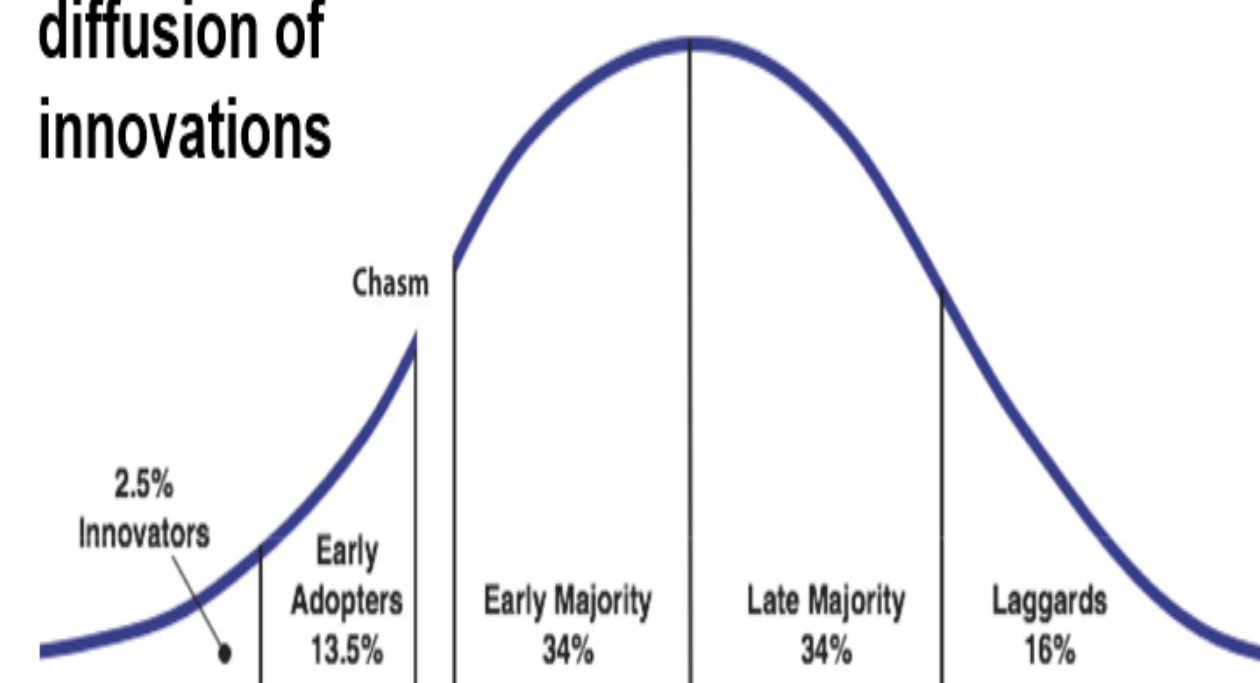
## Literature Review and Methods

Key aims were to investigate the feasibility of readily accessible translational research to promote evidence-based practice in educational audiology, examining two aspects: research in the field of education of the deaf (including audiology), and the broader 'knowledge management' body of research. The first aspect revealed several categories of information management; namely peer-reviewed journals, practice guidance, dissertations and efforts at making this information available online. The second aspect examined knowledge mobilisation more generally. The pioneering work of the medical field in the area of translational research is fairly well known as a gold standard, and their contributors are world leaders producing credible, accessible health information. The growth industry of translational research and knowledge management is well-established in some fields and embryonic in others. Methods employed for this study were a literature review and focus groups. The search strategy examined three main databases using nine search terms and identified 47 sources as being most relevant, which included peer-reviewed journal articles, books and websites that disseminate evidence. Quality, relevance, robustness and impact were considered. Focus group members (27) included stakeholders, service-users and module leaders of postgraduate programmes who were mixed in terms of gender and race and were from a homogeneous social class and adult age group. The number of groups was judged adequate for saturation, and the question paradigm was open-ended with limited structure, in order to allow discussion to develop. Data/discussions of the focus groups, including consensus, were recorded in written notes and classical content analysis was applied, achieving themed similar groupings.

## Results and Discussion

Focus group consensus revealed a generally positive view of MESHGuides (critical thinking, contribution to the development of the profession, and promotion of collaborative thinking and working), but concerns related to quality assurance and currency. Literature Review results revealed that a valuable evidence base exists for education of the deaf (including audiology), that successful models exist for translational research such as NICE guidelines, and that knowledge management is a growth industry in which the embryonic MESHGuide development sits. Roger's (2003) Theory of the Diffusion of Innovations explains the spread through societies of new ideas and technologies.

Rogers' Theory of the diffusion of innovations



Although MESHGuides are very much in the 'innovators' stage, nevertheless a start has been made on which all future developments can now build. Considerations for future work in this area include BATOD Foundation Trustees Big Lottery funded training workshops for parties with specific MESHGuides to develop. Data for future studies can be interrogated from MESHGuides databases to look at global impact.

## Case Study

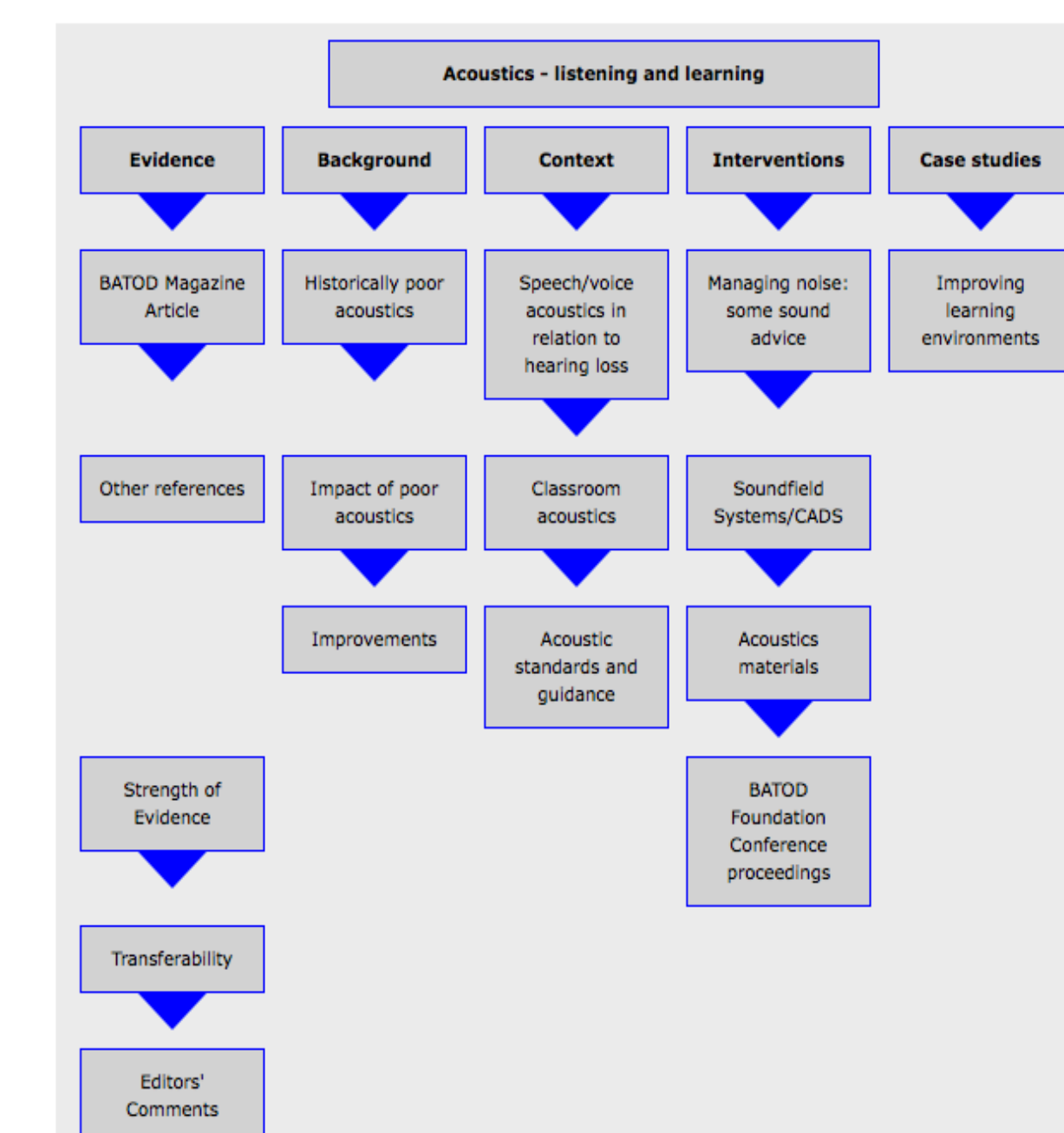
Important to clinical and educational audiologists alike, the Acoustic Accessibility MESHGuide endeavours to answer the question of why creating a good listening environment is imperative. Its development over a seven month period is considered here. The authors are Teachers of the Deaf, Educational Audiologists and action researchers, all of whom serve also as BATOD Foundation Trustees. Data collected included empirical research, systematic reviews, interviews, workshop presentations, minutes of online meetings to provide an overview of the knowledge base; and the theory and practice related to knowledge mobilisation globally. Using a mind-map technique, the structure was fleshed out, ultimately transferring the actual text into a document that the web-builder used to build the MESHGuide online. Collaborative tools allowed a single document to be a receptacle for ideas and developing text which multiple users amended in real time.

A table template became the functional tiles for the interactive online interface from which end users can also generate a printable PDF. Online it manifests as a single table format with five columns of boxes with content in a single cell. Clearly marked headings, hyperlinks, images and further content are revealed when the box is clicked. Revisionary and technical decisions, additions of tags and links and cross-checking of references were accomplished remotely leading to its launch and service as template for future MESHGuides. After the launch, this MESHGuide along with others remains an organic process as editing and growth can be on going, and indeed is required for quality assurance.

### MESHGuides

#### Acoustics - listening and learning

Ann Underwood, Roger Turner, Stuart Whyte | View as single page | Comment/Feedback



## Conclusion

The growth industry of knowledge mobilisation is well-established in certain disciplines and just emergent in others such as educational audiology. MESHGuides stand at the juncture between these two as an opportunity and vehicle to move the growing wealth of underpinning research in audiology related to education, very actively and pragmatically into the minds and hands of professionals working together to serve children and young people who are deaf.

## References and Contact Details

- Leask M (2011) Improving the Professional Knowledge Base for Education using knowledge management tools. *Policy Futures in Education*, 9(5), 644-660.
- MESH (2015, Sep 29). Retrieved from Mapping Education Specialist KnowHow: www.MESHguides.org
- Nutley S, Walter I, & Davies H (2003) From Knowing to Doing. *Evaluation*, 9 (2), 125-148.
- Rogers E (2003) *Diffusion of Innovations*, 5th Edition. Simon and Schuster.
- Rosenberg J, Turner R, Underwood A, Whyte S (in press - 2016) MESH Guides, Translational Research in Deaf Education Practice. *Int J Tech Inc Ed*, 5:2.
- Sintek S (2011) *Start with Why*. Penguin.
- CONTACT: J.rosenberg@maryhare.org.uk