

## Evidence-based practice into a curriculum for speech and language therapists

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### Abstract

In this paper, I will offer an overview of how evidence-based practice was implemented into a four-year bachelor curriculum for speech and language therapists at Hanze University Groningen. I will mention some of the problems we encountered in implementing evidence-based practice. A short overview is given of actions we took to manage these problems. However, many questions are still not being answered, you are invited to share your thoughts on this subject with us.

### Introduction

A new set of standards for clinical certification in speech-language pathology took effect in The United States of America on January 1, 2005. These new standards issued by the American Speech-Language-Hearing Association (ASHA) outline an action plan identifying the knowledge and skills needed for clinicians to enter the practice of speech-language pathology (Nail-Chiwetalu & Bernstein Ratner, 2006). One of the standards, Standard III-F, states that, “the applicant must demonstrate knowledge of processes used in research and the integration of research principles into evidence-based clinical practice” (ASHA, 2004).

Something similar took place in the Netherlands at the same time. The actualized profession profile for speech and language therapists (SLTs) in the Netherlands was published in 2003. This profession profile was converted into a standard competence framework for the education of SLTs in 2004. This was done in collaboration with all speech and language educational institutions in the Netherlands (SRO), the Dutch Association of Logopedics and Phoniatrics (NVLf) and representatives from the professional field. The competence framework consists of nine competencies, of which one, competence 2a, deals with providing care “the speech and language therapist offers the client(s) speech and language therapy in a professional and sensible manner in order to ease and/or remove the burden of disorders and/or limitations” (SRO, 2005). A sub competence, competence 2aIII, defines the mastering levels of evidence-based practice (EBP) (table 1).

Sub competencies	Mastering level 1	Mastering level 2	Mastering level 3	Mastering level 4	Mastering level 5
.....functions evidence-based	I am able to compose (learning) questions based on a certain problem. I can use information sources effectively and can select the relevant information.	I am able to compose questions following a diagnosis, prognosis and treatment of a case and can use information sources to find relevant research on the subject at hand to use in answering my questions.	I am able to give a critical judgement about the validity and practicality of found evidence, even when these are scientific research results. I can create a link between possible solutions and my own practical experiences.	I am able to make choices based on my evidence-based functioning with regard to intervention to individual clients and I can justify and evaluate these choices.	I am able to integrate evidence-based functioning in my own professional functioning.

Table 1

*Competency area 1 (SRO, 2005) Prevention, care, training and advice: working with and for clients.*

*Roles: Care provider/therapist, trainer, advisor and coordinator.*

*Competency: 2.a Providing care*

### **Implementation of EBP into our curriculum**

Evidence-based practice was implemented into the curriculum for SLTs at Hanze University in 2006. Our curriculum is a four-year bachelor undergraduate program. We use problem-based learning in our curriculum. Students learn via contextualized problem sets and situations. They work on clinical cases in small groups during the first ten trimesters. The last six trimesters are used for placements and thesis writing. Because we use problem-based learning, we implemented EBP in an integrated way.

We feel that the teaching of EBP should, as far as possible, be integrated into the professional setting so that students not only learn the principles and skills, but learn how to incorporate these skills with their own life-long learning and client care (Dawes, Summerskill, Glasziou, Cartabellotta, Martin, Hopayian et al., 2005). It is therefore necessary for students to master all five steps of EBP (Sackett, Richardson, Rosenberg & Haynes, 1997) namely: asking, acquiring, appraising, applying and assessing. We want our students to become critical therapists who have integrated evidence-based practice into their own therapeutic thinking and acting.

Students focus on asking the right clinical questions and finding answers on the open Internet during their first year. In their second year, students have training sessions with a librarian and the lecturer on EBP to find their way in electronic databases. They must provide every case they study with a PICO-question and search for evidence in peer-reviewed studies. In their third year, students have training sessions on how to appraise the evidence. Students must apply and assess the evidence on their own clients during their internal and external placements. Following these steps, students go through the EBP cycle.

### **Problems we faced and how we addressed them**

Students work on clinical cases during their trimesters. It is quite a challenge for them to provide every case with evidence, as you might have expected. So, what to do with cases on which there is no available evidence or where evidence is of low quality? We have to teach students how to deal with this.

Critical appraisal appears to be difficult for some of our students because difficulties they are facing with statistics. Our students are undergraduate students; some teachers feel critical appraisal might be too difficult for them. There was even discussion about what is EBP and what is not EBP among our own lectures and tutors at Hanze University. Therefore, acting as a role model might not be the same for everyone. To deal with this, we issued a standard on EBP for all departments of the School of Healthcare Studies. As a result, all departments, including Physiotherapy, Nutrition and Dietetics, Oral Hygiene, Medical Imaging and Radiation Oncology, and Speech and Language Therapy, have to apply to this standard. This leaves little room for discussion on what is EBP and what is not.

Most of our students are eager to master the competencies and while doing their placements, they expect to be able to put their competencies into practice. In our field however, interest in EBP is relatively young. For years, SLTs have been taught to consider their client's wishes and their own experience in making clinical decisions (Gillam & Gillam, 2006). Most SLTs first consult colleagues while seeking information, followed by textbooks, continuing education workshops and the Internet (Nail-Chiwetalu & Bernstein Ratner, 2006). Most SLTs do not seek their information in peer-reviewed publications; they often do not have access to these resources. So, there is a gap between knowledge and skills of our students and the actual

clinical decision making by professionals in the field. Students might become frustrated when they do not get the opportunity to practice EBP in their placements.

Training sessions on EBP were held with SLTs in May 2007, in order to bridge the gap between students and professionals in the field. In these sessions, it became clear to us that SLTs worry about the devaluation of the client's role "how can you rely on evidence from large populations when every client is unique?". SLTs showed concern about their own clinical practice "I have done this for years, did I do this wrong all this time?". We also sensed a growing tendency of polarization, some SLTs welcome EBP while others were quite skeptical, "EBP is just a passing hype". We should therefore be careful not to overemphasize the evidence. For some researchers the essence of EBP is empirical evidence from randomly controlled trials (RCTs). In our opinion, all three aspects of EBP, client values, therapist's expertise and scientific evidence are equally important.

We feel we must prepare SLTs for the problems they will face when dealing with EBP. EBP requires SLTs to critically self-examine their own practices. They have to consider alternatives based on evidence and justify their uses of practices on which there is weak, or even no available, evidence. SLTs have to integrate available evidence from research literature with client's unique values and circumstances and their own clinical expertise (Fey, 2006). Busy SLTs often have heavy caseloads and ample time. It is understandable that they complain about costs and time that is needed for EBP. Finding good research evidence takes a great amount of time and you might end up with nothing useful. The evidence is written in a way that is not easy accessible, especially when you take into account it is mostly written in English. Furthermore, a great amount of the evidence is still of low quality, which makes it difficult to decide what to use, and what not.

We encourage SLTs to form working groups assessing specific clinical questions. Our students can participate in these groups and even take a leading role. We share useful bookmarks with SLTs and encourage them to join international groups on the Internet. We feel there is a great need for preappraised evidence and critical appraisal tools for qualitative studies. We started a monthly column in the Dutch Journal for Logopedics and Phoniatics in which we preappraise research studies. We did so in collaboration with all educational institutions for speech and language therapy in the Netherlands (Spek B & Beer de J, 2007). Above-mentioned problems will diminish over time. However, at this time, we have to cope with them and we worry about the effect this will have on our students' capacities to handle EBP. It is our firm opinion we must prevent SLTs to polarize (Kahmi, 2006). It is therefore important that we are open to discussion.

## **Conclusion**

EBP in our field is an ongoing process that is far from perfect. There still are many obstacles along the way. Educational institutions can play an important roll in guiding SLTs through this complex matter. We must be careful to prevent polarization and not to rush things. It is my personal opinion, evidence-based practice resembles slow travel "slow travel: getting from point A to point B at a leisurely pace. Slow travelers, who prefer trains and boats to cars and jets, brag that they take as much pleasure in the journey as in the destination (Keats, 2007). Providing the best care for our clients is our important destination, but the journey on the EBP-train can be quite fun. In this workshop, I would like to share some of our thoughts on this with you. Feel free to bring up your own problems and opinions.

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