Welcome back to our *Trust the Audiologist who Teaches* series. Critical thinking is the basis for good audiology, the difference between a technician going through steps and a professional providing the best possible care. How can we foster this in our students? This edition focuses on some strategies for fostering critical thinking.

**Encouraging and Developing Critical Thinking in a Clinical Context**

By: Tom Muller, AuD

**Deliberate practice.** Malcom Gladwell in his book *Outliers: The Story of Success* implied that most anyone could be great at anything, they just need to do it for 10,000 hours. Much of this thinking is based on the research of Anders Ericsson. Dr. Ericsson does not agree with this conclusion. Reflecting on my personal inability to spell or write any better than the next person illustrates his objection: I read two books a week – 46,000 hours over the last 30 years. Doing something over and over doesn’t significantly improve performance unless the student is motivated to “attend to the task and exert effort to improve their performance.” (Ericsson et al, 1993). Create an environment where your student MUST think about what they are doing in order to problem solve or improve. Doing without thinking is the enemy. Here is a link to a wonderful interview with Anders Ericsson on this topic: [http://freakonomics.com/podcast/peak/](http://freakonomics.com/podcast/peak/) So how can we do this? Here are some ideas.

**Force critical thinking by creating distance.** In the triad Patient-Student-Clinical Instructor, if the instructor is close at hand, the focus is on them. Discussion is directed to the instructor and the student can AVOID critical thinking by waiting a beat for the instructor to jump in. Consider getting farther away and seeming to divert your attention when appropriate as the student works or interacts with the patient. Mary Barnum and her colleagues have a nice discussion of this in their description of the Supervision-Questing-Feedback (SQF) model of clinical instruction (attached) Medicare, on the other hand, requires the instructor to be in the room, not working on anything else, counterproductive to good clinical education. Still, a little difference even in the room can make a big difference. Consider situating yourself at another table facing at least partially away. This change in the dynamic goes a long way toward making the student think carefully and make decisions on their own.

**Strategic questioning.** Consider creating a culture in which you regularly ask your student questions in front of your patient. Barnum et al. again do nice job of fleshing this out in terms of types of questions depending on the level of the student and activity. However, the easiest way to get this right is to focus on the failure rate. If a student can confidently respond 80% of the time, and is used to being questioned all the time, they will work hard to figure out the 20% they miss, and won’t feel overly anxious, deflated or self-conscious in front of the patient when they can’t. This process also shows the patient that they should feel confident working with a student because you are actively engaged, and the student is solid on almost all the questions.
Reflective practice. If we want students to think critically, we ought to ask them to think about what they are doing or have done. Ask them to reflect on how things went: Did they rock it? What could they have done differently? What do they expect the outcome to be? Equally importantly, ask them WHY a protocol was done a certain way or a recommendation was made. Be sure they understand the rational, not just the steps. Be open to using this conversation as an opportunity for YOUR OWN reflection and potential revision of your thinking. Stella Ng did her dissertation on reflective practice in audiology education. We have included one of her shorter papers for your consideration.

Community Clinical Educator Spotlight
We are pleased to celebrate this quarter’s featured Community Clinical Educator:

**Richard Primeau, AuD, CCC-A**

Not many people can say they have been an audiologist for 40 years, but Dr. Richard Primeau will be able to say that this year, having spent almost all of that time serving veterans and working with students. He began his time with the VA Healthcare system in Chicago in 1981, and moved to Tucson in 1985. Shortly thereafter his first UA audiology student was Sarah Ascher (then Super), who then became a longtime clinical educator and mentor to many other students. Such is an example of the legacy he has had on audiology in our community, having taught students near-constantly; having taught so many of the audiologists practicing in Tucson today.

Dr. Primeau says that working with students has been one of the best parts of his job. “Students keep you on your toes. When you have students with you, you can’t become complacent or stale in your thinking.” Students challenge you to stay current to answer their questions, he explains, and bring to you what they are learning. Our students and our community has been lucky to have Rich!

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