CSD 710: Research Methods and Critical Thinking in Communication Sciences and Disorders

Fall 2020

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Office Hours: pending clinic schedule Class: Tuesday 10:00-10:50 am

Course Description

- ✓ Mr. Jones saw a news segment about an innovative treatment that promises to cure his stuttering and he wants you to begin incorporating it into his speech therapy sessions.
- ✓ Your school district has invested in a new tablet-based protocol to treat pragmatic language problems with teenagers. Your special education director wants you to implement this "state-of-the-art" treatment even though you have questions about teens learning social skills without actual human interaction.
- ✓ You just completed an evaluation of a nonverbal preschooler with a G-tube who has a rare syndrome. You excitedly begin to research the syndrome before you plan intervention, but you cannot find any research about prognosis or types of intervention with regard to speech, language, cognition, and swallowing.

As a practicing speech-language pathologist, you will confront scenarios like those described above on a frequent basis. As a licensed and nationally credentialed speech-language pathologist, you will be required to engage in evidence-based practice. ASHA defines evidence-based practice as "an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions" (American Speech-Language-Hearing Association, 2005).

In this course you will learn about different types of research and how research studies are designed. You will develop skills to critically read research articles and determine the level and strength of the research. Through application activities (current events and discipline-specific), team-based learning, and group discussion, you will develop a systematic approach to critical thinking that will benefit you not only as a speech-language pathologist, but also a responsible citizen.

American-Speech-Language-Hearing Association (2005). Evidence-based practice in communication disorders [Position Statement]. Available from www.asha.org/policy.

Text

Browne, M. N., & Keeley, S. M. (2018). *Asking the right questions: A guide to critical thinking*. New York: Pearson Education, Inc. (12th ed.)

COURSE OUTLINE					
Date	Content	Chapter			
September 8	Course Introduction	Syllabus			
	Application Activity				
September 15	In-Class Discussion	Canvas			
September 22	Asking the right questions	B & K—Ch. 1			
	How to read journal articles	Canvas			
September 29	PICO, IRB process, history of research	Canvas			
October 6	Issues and conclusions	B & K—Ch. 2, 3			
	Reasons				
October 13	Ambiguous words and phrases	B & K—Ch. 4			
	Journal article critique	Canvas			
October 20	Research design	B & K—Ch. 5			
	Value and descriptive assumptions				
October 27	Fallacies	B & K—Ch. 6			
November 3	Evaluating evidence	B & K—Ch. 7, 8			
November 10	Rival causes	B & K—Ch. 9			
November 17	Examining statistics	B & K—Ch. 10			
		Canvas			
November 24	Coming to reasonable conclusions	B & K—Ch. 11, 12			
	Insurance appeal				
December 1	Speed Bumps that Interfere	B & K—Ch. 13			
December 8	What if there is no evidence?	Canvas			
December 17 8-10 am	FINAL: Critical Thinking Scenario				

Course Objectives

- 1. Students will identify, compare, and contrast different levels of evidence (e.g., Level 1-clinical, randomized trials) and different types of research (e.g., qualitative, applied).
- 2. Students will apply a structured critical thinking approach to solve various clinical issues after considering a variety of perspectives and interventions. This will include how to proceed with a client when there is no/limited research on a particular disorder, syndrome, etc.

- 3. Students will consider the evidence-based triad of research, clinician values/perspective/experience, and client and family values/perspective/experience to support intervention decisions.
- 4. Students will demonstrate skill in reading and comprehending a variety of journal articles and types of research to assist them in making evidence-based clinical decisions.
- 5. Students will learn to access and use evidence-based resources using the library, databases, speechBITE, and preset literature notifications of new information.
- 6. Students will identify fallacies and biases that impact critical thinking.

Education is not the learning of facts, but the training of the mind to think.

Albert Einstein

Course Assignments

- 1. Journal Article Critique—You will read and analyze a journal article and explain/critique the research design, bias, limitations, and conclusions (LO 1, 4).
- 2. Appeal Letter—You will write a letter of appeal using a critical thinking approach by identifying and responding to an argument through a well-written and research-based argument of your own (LO 5).
- 3. Critical Thinking Scenario—You will be given a multi-faceted simulation of a real-life professional experience. Using only the materials provided, you and a partner will need to analyze the information with a critical eye and evaluate the situation to come up with a final product based on critical thinking and application of the research given to you (LO 1, 2, 3, 4, 6)
- 4. Hidden Brain podcast summary (optional)—You have the option to listen to a Hidden Brain podcast on the ostrich effect bias and write a summary (LO 6).
- 5. Quackery detection (optional)—Using the definition of quackery from the website, "Quack Watch," find an example of quackery from social media or other sources and explain why it is quackery (LO 2, 6).

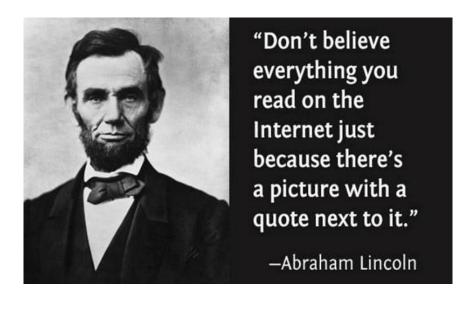
ASHA Competencies Met:

ASHA IV-E, F, G: The applicant must have demonstrated knowledge of standards of ethical conduct, the processes used in research and of the integration of research principles into evidence-based clinical practice, and contemporary professional issues.

Grading

This course will use a specifications grading system (Nilson, 2014), which is likely different from how you have been graded in the past. This grading scheme is directly related to your demonstrated competencies across the various learning outcomes for the course, which also correspond to ASHA's standards, knowledge, and skills. This type of grading also gives you a choice in determining your desired grade and the necessary work and competency to achieve it. All assignments will be graded as pass/fail, or more specifically as "Met competencies" or "Did not meet competencies." You will have two "tokens" or opportunities to meet competency if you did not meet it initially. Thorough directions will be given for each assignment with clear criteria for meeting competency.

B-	В	B+	A-	A
Complete	Complete	Complete all	Complete all	Complete all
assignments	assignments 1,	the	the	the
1, 2, 3	2, 3	requirements	requirements	requirements
	competently	for "B"	for "B"	for "B"
		competently	competently	competently
Competence	All	Complete 1 of	Complete both	Complete both
not met, even	competencies	the 2 reflections	reflections	reflections
after use of 2	are met, but 2	competently,	competently (4,	competently (4,
tokens	tokens may be	your choice (4	5)	5)
	used to achieve	or 5)		
	mastery			
		All	All	All
		competencies	competencies	competencies
		are met, but 2	are met, but 1	are met on the
		tokens may be	token may be	first attempt
		used to achieve	used to achieve	
		mastery	mastery	



First things first—Guiding Principles for the Pandemic Classroom:

- 1. This isn't what we wanted.
 - We never wished for a pandemic, social distancing, or wearing masks.
 - We didn't hope for an online class, teaching remotely, learning from home, or mastering new technologies.
 - We need to acknowledge that we will miss being in a shared space together, developing relationships with one another. It's okay to be sad about that.
- 2. The humane option is the best option.
 - We are going to prioritize supporting each other as humans.
 - We are going to prioritize simple solutions that make sense for the most.
 - We are going to prioritize sharing resources and communicating clearly.
 - We are going to support different thoughts, perspectives, and experiences, while honoring differing identities (such as race, gender, class, sexuality, religion, ability, etc.). Everyone is welcome here.
- 3. Although things have to be adapted for online classes, rich, deep learning will still occur.
 - Some assignments will need to be modified
 - Expectations and outcomes have been adjusted, while still providing
 opportunities to read, discuss, and connect with each other as we apply course
 content.
- 4. We will foster intellectual nourishment, social connection, and personal accommodation.
 - Accessible asynchronous content for diverse access, time zones, and contexts
 - Synchronous discussion to learn together and combat isolation
 - Regular office hours and prompt communication through email.
- 5. We will remain flexible and adjust to the situation.
 - Nobody knows where this is going and what we'll need to adapt.
 - Everybody needs support and understanding in this unprecedented moment.

Class Policies

- You will be held to the UWSP Academic Standards, which prohibit cheating, collaborating with others on individual work, plagiarizing, etc. For more information, refer to https://www.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf.
- 2. Students with accommodations through disability services will be accommodated via online platforms. I have worked hard to make all materials accessible to screen-readers and have added closed-captions. However, I'm only human and may have missed something. If I am not adequately meeting your accommodations, please let me know so I can adjust accordingly.
- 3. There will still be deadlines, but if you are unable to meet those deadlines, please let me know **before the due date** (if possible) and we will work out a plan together. I want to be mindful of different working conditions/environments,

- illness, caregiving, mental health, technology issues, and other potential variables during this stressful time.
- 4. Lecture materials and recordings for CSD 773 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.
- 5. Attendance is to our synchronous class is strongly recommended. The time will be spent clarifying difficult concepts and learning to apply the course material. Additionally, this is a great opportunity for us to connect with and get to know each other. However, all synchronous Zoom meetings will be recorded and uploaded following the class. If you miss class due to illness, I do not need a doctor's excuse.

Other Important Tidbits

- 1. Contacting the instructor: I will have established weekly office hours in Zoom once the clinic schedule is set and that is the best time to see me. I will be using a Zoom scheduler, so that you can alert me if you are coming. If those hours don't work, then email me for an appointment. You don't have to have a specific class-related question to attend office hours. I also enjoy when students drop in virtually for a brief visit just to chat. Regarding email, I will try to respond within 24 hours. If I haven't responded in that timeframe, please send me a reminder email. I get a lot of email and sometimes yours may get "buried" in my inbox. To have and model a work/life balance, I don't respond to emails after 5:00 pm or on the weekends.
- 2. Any student who faces challenges securing their food or housing or other crisis and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the me if you are comfortable in doing so, so that I can direct you to relevant campus resources (e.g., food pantry, counseling center, etc.). I am also posting resources in a module on Canvas. I am happy to assist you with issues beyond the classroom if I can and will maintain confidentiality. I want you to succeed.

EXPECTATIONS

Students are expected to:

- Complete assigned readings before class.
- Come to class promptly and prepared to actively participate in discussion and in-class assignments.
- Answer questions asked by the instructor.
- Ask the instructor for clarification when needed.
- Display appropriate respect and courtesy to other students, guest lecturers, and instructor.

The instructor is expected to:

- Be thoroughly prepared for class with handouts, questions, knowledge of assigned readings
- Have a solid rationale for why she is teaching the material
- Begin and end class on time
- Announce any changes to the syllabus during the semester, including date changes, in advance
- Answer any student questions. If I don't know the answer, I will find it out
- Meet with students outside of class to discuss concerns or questions about the course requirements or the student's performance
- Treat all students with courtesy, have set office hours, provide constructive feedback, and return assignments efficiently.

Zoom Netiquette:

- You are not required to turn on your camera. I realize that there are a variety of environmental and safety reasons that you may not want to use your camera. It may also interfere with your bandwidth. If you can use your camera, it is very helpful for me because it is much more energizing and rewarding to connect with faces rather than blank screens. However, if you don't feel comfortable using your camera, please upload a natural looking headshot of yourself (e.g., not all glammed up for a social event if you normally wears sweats and a baseball hat) so I can at least start connecting names and faces.
- If you do use your camera, make sure you are dressed appropriately.
- If you want to speak, raise your hand physically or use the "raise hand" feature. Start your question/comment by stating your name.
- Use your real name and have it appear on the screen.
- Mute your microphone if you aren't talking.
- Feel free to use the chat with messages relevant to the class. Keep messages fairly short and don't type in all caps.