2021

Applying the International Classification of Functioning, Disability & Health: A Team-Based/Project Based Course for Undergraduate Students

Laurie Schroder

East Tennessee State University, schroderl@etsu.edu

Recommended Citation

Schroder, Laurie. 2021. *Applying the International Classification of Functioning, Disability & Health: A Team-Based/Project Based Course for Undergraduate Students*. Johnson City: East Tennessee State University.

https://dc.etsu.edu/etsu-oer/9

APPLYING THE INTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY & HEALTH

A TEAM-BASED/PROJECT BASED COURSE FOR UNDERGRADUATE STUDENTS

Laurie A. Schroder, PT, DPT, EDD, DMin

College of Rehabilitative & Clinical Sciences | East Tennessee State University

Introduction for Faculty

This course is the product of several years of effort and struggle – both the students' and mine! Believing that students should both learn and enjoy class, that active learning was the way to achieve that, and that Team-based and Project based Learning (TBL and PjBL, respectively) each offered amazing benefits, I have worked to develop a course that used the best of both while balancing out some of what I perceived of as challenges within each delivery method. I won't go into those challenges at length here but suffice it to say that I sought to eliminate some of the time demand of TBL and the relative lack of structure of PjBL. By combining them, I think I have achieved some of what I set out to do.

This course is designed to be delivered as a combined TBL/PjBL course, with elements of TBL (team formation, individual and team readiness assurance tests [iRATs and tRATs], and cyclical structure)(Michaelsen et al., 2004) and PjBL (sustained inquiry, a challenging problem, authenticity, public product)(Bell, 2010) both prominently included. The text itself could be used in a course that is delivered in a traditional manner, and all of the elements of this text would potentially serve as supports, although a traditional course may need the addition of exams, which is not a part of this course as created. Additionally, if delivered in a traditional manner, revision of the project would be required, as the deliverables would be formidable for one student.

In the TBL/PjBL structure, each team is given a real-world problem to solve, in the form of a client case. They solve that problem and answer questions related to it within the framework of the International Classification of Functioning, Disability and Health (ICF)("International classification of functioning, disabiltiy and health: ICF," 2001). Each deliverable, submitted at the end of a unit, is framed by an element of the ICF. Within each unit, students engage in TBL's

iRAT and tRAT process. Additionally, they perform peer evaluations (a component of TBL), but also self-assessment (a component of PjBL), which assists in their metacognitive development and informs their perspective of their peers' engagement. The peer evaluations are modeled after TBL's common examples (easily found online); the self-assessments seek to focus students on their own academic and metacognitive development through prompts. Students are asked to do the self-assessments first, and then the peer evaluations, after each deliverable is submitted. Guidance for all these elements is provided in this text, in the Appendices.

Team-based Learning was developed by Larry Michaelsen as a means of creating a learner-centered classroom for large business classes at the University of Oklahoma(Michaelsen et al., 2008). TBL is presented in a cyclical unit format, with teacher-specified content and unit objectives guiding pre-class preparatory readings, a Readiness Assurance Process, and Application Activities. Teams are purposefully created, and they remain together throughout the term, working autonomously in a lecture-hall or classroom setting.

Pre-class individual preparation requires that students read, watch videos, or otherwise engage with material that prepares them for the in-class time during which they will participate with their teammates in quizzing on and applying what they've learned. Often, this pre-class study is directed by a learning guide or study checklist within which the course instructor clearly communicates what students are expected to learn. This is the student's first exposure to the material for a given unit, of which there are usually five to seven in a course. Students come to class prepared to demonstrate their understanding of the content for the unit in the Readiness Assurance Process.

The second part of the cycle occurs in the classroom. Students enter the Readiness Assurance Process by first taking an individual quiz called an Individual Readiness Assurance Test (iRAT),

which is made up of approximately ten questions that assess the student's understanding of the key points of pre-class study. The student then joins his or her teammates to take the same quiz as a team (the Team Readiness Assurance Test [tRAT]), often with the opportunity to select answers until the team arrives at the correct answer. The goal of the tRAT activity is to engage students in dialogue about the material and peer-to-peer teaching and dialogue This process of team quizzing, collaborating to select an answer, and the use of Immediate Feedback Assessment Technique or IF-AT cards (scratch off cards that reveal correct and incorrect answers) provides feedback to students regarding their thinking processes and comprehension of the topic. After completion of the iRAT, teams are given an opportunity to challenge tRAT answers in writing. Following the iRAT and tRAT, the instructor delivers a mini lecture that reviews areas in which students had difficulty, and discussion wraps up the Readiness Assurance Process.

For the third and final part of each cycle, students engage in a teacher-created, topic-focused Application Activity. These activities are intended to give teams the opportunity to apply what they've learned in pre-class preparation, during the Readiness Assurance Process, and through the mini lecture. These activities should be real-world, and require exploration of additional material, the engagement of all the team members, and higher-level problem solving. Michaelsen described Application Activities as requiring 4 S's: a significant problem, the same problem for all teams, problems for which a specific choice must be made, and a process that requires simultaneous report. This third and final part of the TBL cycle is where most class time is spent and requires students to engage in intense conversation amongst themselves and, during reporting of their decisions, between teams. This conversation does not always produce a right or wrong solution, but instead results in timely and relevant feedback for each team on the quality of their thinking and their decision-making process.

Team-based Learning usually has a three-pronged grading system. First, students are graded on their iRATs, which gauge their individual pre-class preparation; second, all members of a team are graded on their tRAT, which evaluates their ability to work together to answer the same multiple-choice questions found on the iRAT; and third, students receive a peer grade from their team members regarding their preparation and participation as members of the team. This third piece of the grading structure serves to reassure students that there is a stopgap against student loafing, while it also doubles as a means of providing peer-to-peer feedback. Some faculty include grading of the Application Activity into the grading scheme, or only grade a portion of the course in alignment with TBL principles, leaving traditional grading for quizzes, exams, papers, or other items in place as well.

One of the strengths of TBL is the consistent and frequent student feedback built into its structure. Students receive feedback during the tRAT discussions as they explore their team members' responses to the questions on the quizzes, as well as how they each arrived at their answers; if using IF-AT scratch off cards, the team receives immediate feedback regarding their answer choices. Following the tRAT, the team has the option of attempting to challenge a correct answer on the tRAT through the provision of written argument and supportive citations, and then feedback that can correct erroneous thinking is provided through a clarifying mini lecture provided by the instructor. Feedback from other teams is part of the discussion following the Application Activities as each team presents and defends their choices, and finally, peer feedback provides information to students concerning each team member's engagement with his/her peers(Burgess, 2020).

PBLWorks describes Project Based Learning as a "teaching method in which students learn by actively engaging in real-world and personally meaningful projects" (*What is PBL*, 2021). It

differs from TBL in that it does not necessarily follow a cyclical unit structure, is not instructor-driven, and, as opposed to TBL, engages students for an extended period of time in an authentic project or challenge that they work through in their own way. For PjBL, students do not do a group project at the end of a unit; instead, they are engaged in a process of rigorous inquiry in which the project *is* the unit, and collaboration, critical thinking, communication, and exploration and development of understanding of the nuances of a topic are required. There are seven essential Gold Standard Project Design Elements that provide the framework for PjBL. They can be found at the PBL Works website (https://www.pblworks.org/what-is-pbl/gold-standard-project-design), and include: 1) a challenging problem or question; 2) sustained inquiry; 3) authenticity; 4) student voice and choice; 5) reflection; 6) critique and revision; and 7) public presentation. There are also seven Gold Standard Teaching Practices, including: 1) design and plan; 2) align to standards; 3) build the culture; 4) manage activities; 5) scaffold student learning; 6) assess student learning; and 7) engage and coach.

For Project Based Learning, the project is the point of the course, and it needs to be well-planned for. A PjBL course begins by selecting a problem that requires a solution, and then giving that problem to students to solve. The problem or question is focused on the standards or objectives identified by the instructor for the course and is at a level that will challenge the students throughout the term. To solve the problem or answer the question, students engage in discovery learning within a team, using any number of resources at their disposal, and they make choices in how they will present their solution to the problem they've been given. For example, for this course, students are encouraged to present their deliverables in any form they'd like – as papers, presentations, videos, etc. Within the boundaries of the course, opportunities are provided for student reflection on their learning and team engagement, and there are processes

by which they receive feedback and revise their work. Again, in this project, that is provided via the deliverables schedule, and revision on every part of the project is encouraged right up until the end of the course. Finally, students present their project, their solution, publicly, demonstrating their learning beyond the classroom.

Many of the essential elements of PjBL align with TBL, but there are elements that differ and complement it. For example, PjBL requires sustained inquiry into one problem or question, vs. TBL's divided unit structure; PjBL allows for some student autonomy and direction of the project, where TBL is instructor-driven; reflection in PjBL adds a layer of thinking about processes and learning that is absent in TBL; and in PjBL, students have an opportunity for revision of work based on instructor-feedback throughout the course. For PjBL, no grade is ever final, until the final grade is submitted.

This course attempts to take the very best of PjBL and set it down within the structure of TBL, taking full advantage of TBL's frame and form. What PjBL lacks in direction, TBL provides. What PjBL lacks in terms of measurable, formative product, TBL delivers. Where TBL normally demands a large faculty time commitment – in the development of unit Application Activities – PjBL naturally provides deliverable chunks of a larger, authentic project. In summary, the two delivery methods together create a structure that takes advantage of the best of both while balancing each method's challenges.

Deliberate decisions should be made about your planned objectives for this course, and how you will know that students have met those learning objectives. I would encourage you to explore L. Dee Fink's taxonomy for guidance on how to think about these connections (Fink, 2003). I have included information from my syllabus, to include my objectives and expected learning outcomes, in Appendix A. My outcomes are associated with an understanding of the

ICF, an appreciation of clients and their diagnoses within the ICF, and with the individual student's ability to function as a learner and member of a team. These may or may not be in alignment with your objectives and outcomes; however, I believe the course design does enable these to be met. Feel free to write your own; it is my intention that this text serve as a sandbox – play around in it as you wish.

Regardless of where you land with your course design, if you choose to deliver this course within the framework presented in this text, students must be introduced to Team-based Learning (https://teambasedlearning.site-ym.com/general/custom.asp?page=started) and Project based Learning (https://www.penpalschools.com/blog/how-to-introduce-Project based-learning-to-your-students) early to get their buy-in to the process. Don't skip this step! If you do, students will be confused about what's happening for the first several weeks of the course and their confusion will lower their engagement level and your and their satisfaction.

Before you start: Assign your students to teams. These teams should be as homogenously heterogenous (Haidet et al., 2012) as you can make them, per good team assignment guidelines. These teams should be designed to spread strengths across teams and to avoid cliques. Then decide which case each team will be given (example cases are included in the appendices). I have found that this can be equally successfully done randomly, through faculty choice, or through student selection. Write your "welcome to the company" letter (or use mine) and prepare for the first day with an introduction to the class, to TBL, and to metacognition and self- and peer-assessment (self- and peer-assessments can be easily created and set up in your college's learning management system).

For each module, pre-reading and resources for engaging with the topic are provided – that is what makes up the bulk of this manual. And then, beginning in Module 3, instructions for

deliverables are included as well as pre-work guidance. Individual Readiness Assessments (iRATs/tRATs) are included in Appendix B.

I hope you have fun with this and that your students learn a lot about themselves and the topic! Don't hesitate to reach out if you have any questions!!

WELCOME to WE ARE REHAB Associates!

We are happy to have you join the team. For this course, we are working within the simulated framework of a company for which you have just come to work, made up of rehabilitation professionals who respond to client requests to create community healthcare programs for specific client/client populations.

You will be assigned to a working team made up of students who are each acting in the role of one of several rehabilitation practitioners. For example, depending on your assigned project, you may require a physical therapist, occupational therapist, speech and language therapist, recreation therapist, social worker, or any other number of licensed, master- or doctoral-prepared professionals. For the duration of the course, you will serve in your assigned role, as a member of your team. While you will be creating products to submit, this will be unlike any group project you have previously engaged in. This project will require four deliverables over the course of the term, culminating in one final deliverable, which will be presented to your client for approval. You will serve in your role – as a specific professional – and as a member of your team, throughout. Therefore, just as if you were in a real-world therapists' working team, you will be responsible for all the information required from a member of your assigned profession needed to meet the demands of any given deliverable. You will bring to your team's meetings, and to their deliverables, your key piece, to inform the whole.

This course will require that you engage in individual, self-directed learning, exploration of material, sharing of your findings, individual and team quizzes, self- and peer-assessment, and deliverables, as mentioned above. Guidance for all of these will be provided as we progress.

Module One: Thinking, thinking, thinking

1.1 Metacognition

For this module, you will explore thinking, and thinking about thinking. First, get an introduction to metacognition - thinking about thinking - by visiting the link provided for you called *Metacognitive Study Strategies* (Metacognitive Study Strategies Link: https://learningcenter.unc.edu/tips-and-tools/metacognitive-study-strategies/). Read the material on this page carefully. Please don't make assumptions about what you may or may not already know about metacognition. I did not develop a real understanding of this material until I was in my doctorate in education program, which was after I had already completed a bachelor's degree, a master's degree in physical therapy, a doctoral degree in ministry, and a clinical doctoral degree in physical therapy. My point is that, although you may be successful academically, you could still be unaware of some of the strategies that are inherent in a good metacognitive approach to learning. Often, people who are successful in academics have just learned how to play the game of getting good grades, which is not necessarily the same thing as being good at learning (Borkowski et al., 1990). Learning requires that you self-regulate, that you recognize what you don't know and whether you are gaining an understanding of new material, and how you can improve that understanding.

Thinking about how you think and learn empowers you to control your own learning, to develop your own unique and powerful way of learning. Understanding thinking and learning will allow you to control your learning behaviors, to know when they are or are not working, and to modify them to achieve your learning goals. While many of us still fall back on reading and re-reading, highlighting and repetition, and "cramming" prior to an exam, none of these strategies actually work that well (Colthorpe et al., 2019). In the material linked here, you can start to explore some strategies that will work better.

Once you've read through the material from the University of North Carolina, take a few minutes to write down what you've learned – without looking back at the web page. Did you really learn anything? Or did you just skim through? In other words, did you use good metacognitive strategies? Go back to the resource and hit the highlights again and think about how you might use some of the tips discussed on this page in your courses this term. Reading about strategies and applying or practicing them are two different things. You will have to be intentional about changing your study habits to change them. And, as with all habits, change happens best when we take small action steps to move forward. Which strategies do you intend to start working on? Monitoring your learning? Adapting your studies by connecting new learning to old, planning and monitoring your thinking, or maybe taking notes from memory and asking yourself "quiz" questions? Any of these strategies are a great place to start. Write one or two of them down on index cards and post them where you study so that you are reminded to put them into action.

Now go to the second link provided, Metacognitive Teaching Strategies (Metacognitive Teaching Strategies Link: https://ciel.viu.ca/teaching-learning-pedagogy/designing-your-course/how-learning-works/ten-metacognitive-teaching-strategies) and read about metacognition from another point-of-view. Right off, I think you're likely to run into some terms with which you may not be familiar - declarative, procedural, or conditional knowledge or even the term 'cognition'. It's a good metacognitive strategy to notice when you are unfamiliar with or you cannot define every word in what you read, and to stop and explore the meanings of those terms. In other words, to ask what you don't know and to develop a strategy to figure it out. Please do that as you read this article. This practice,

writing down and defining words that you don't understand while you're reading, will help you to begin to apprehend and understand complex material.

I appreciate that this web page is directed to teachers, I want you to appreciate that knowing how teachers think can be very helpful for learners. Being an independent learner means taking responsibility for what and how you learn. Don't expect anyone else (not even a teacher) to meet your learning needs. Your professors have a responsibility to provide you with learning resources and opportunities (to teach you), but no one can provide you with learning. No one can learn for you. Only you have that power. Stop for a minute and process that idea. What do you perceive as the difference between teaching and learning? Can you appreciate that learning is an active process? Does seeing it as an active process fit in with your current thinking? Or do you believe that teachers have a responsibility to engage your attention and keep you entertained? To present you with information in a way that you (and every other member of the class) find palatable and approachable? Can you appreciate why this might be a self-defeating point of view?

How would you learn to do that? Would you need a teacher, or would you explore the resources available to you and seek understanding on your own? Once you found relevant information, followed the instructions you'd found, and worked through the necessary steps of the activity to complete the layout revisions, you would have learned something. Without a teacher. Instead, you would have identified knowledge gaps, sought out resources, and directed your own learning. The process might have included digging a little, being frustrated, going forward and then perhaps, backward, but in the end, you would have directed your own learning and been more likely to have truly learned than if a friend had come along and changed your phone layout for you. If you could teach someone else to move

the applications around on their phone, you would know for sure that you had learned how to do it. Being able to teach something is a guarantee that you have learned how to do it.

This is perhaps a good place to define what is meant by "learning" in this text. Learning is not memorizing for an exam or being able to parrot the bullet points so you can do a brief presentation. Learning is the process of coming to understand something fully enough that it has the power to change your thinking and/or behavior. If you won't remember how to rearrange your apps in a week or two, I would argue that you didn't *learn* anything. The same is true for everything that you do – both cognitively and physically (physical skills or *doing skills* are what educators call psychomotor skills) in class. If you can't teach, at least at a novice level, a newly learned skill to another, you probably have not really learned anything. There is also a time component to learning that should be considered. Non-learning, which is effectively storage in short term memory, is not learning. Learning requires coding and storing in long term memory. It requires that, given the right cueing, information can be retrieved (n.a., 2014)

After you've explored this page a bit (and I hope bookmarked it for further exploration), find the link to the *Metacognitive Awareness Inventory* (Metacognitive Awareness Inventory: https://services.viu.ca/sites/default/files/metacognitive-awareness-inventory.pdf). Please complete the inventory without looking ahead at the scoring. Then, score yourself and drop the inventory into the drop box of the same title.

1.1.1 Independent Assignment: Complete the Metacognitive Awareness Inventory

1.2 Self-Assessment

Metacognition is not just useful for academic learning; it is something that you will use from here until the day you retire your professional license and take up growing heirloom tomatoes

to enter into the local county fair. Actually, you will still use it as you try to learn ways to improve upon your tomato growing. But between today and your salad days (lettuce enjoy a little humor), I would like for you to start thinking about what metacognition looks like in the clinical setting. Please read the article titled, *Clinicians' Perceptions of Self-Assessment in Clinical Practice* (Article: Clinicians' Perceptions of Self-assessment in Clinical Practice: https://etsu.primo.exlibrisgroup.com/permalink/01ETSU_INST/ohp3hf/cdi_proquest_miscellaneous_77481581). Keep in mind as you read this, what you learned about metacognition in the academic setting from the links in the previous section. I want to draw your attention to a few ideas: 1) the ability of clinicians to self-assess is referred to as "engaging in reflective practice"; and 2) it is this ability that leads to "expert practice". We will explore both ideas further, in this course and in other courses in this degree. Also, as a side note, when I use quotation marks, I am using them per APA 7th edition: "to introduce a word or phrase used as an ironic comment, as slang, or as an invented or coined expression; use quotation marks only for the first occurrence of the word or phrase, not for subsequent occurrences" (APA, 2020, p. 159).

What are your thoughts about the therapist's feedback given in this article? Are these clinicians genuinely self-assessing? Do they fully understand self-assessment if you think of it within the framework of metacognition? Can you defend your position? Stop and think about these questions and form an opinion. If you find you don't have one, consider re-reading the article. Consider revisiting the definitions and descriptions of metacognition provided in the last section's links.

I would argue that the clinicians interviewed for this article are not actually using good self-assessment skills, nor metacognitive skills. Consequently, they are working with definitions

of self-assessment that are self-created and not well defined. There is no criticism of the clinicians inherent in my position. In fact, most healthcare providers were not taught good self-assessment skills until very recently (in the relative time of medical education). (Colthorpe et al., 2019; Papinczak et al., 2007) My point is that completing your professional degree and seeing clients does not automatically result in good metacognitive skills. You must practice them, whether you are a student or a clinician. Metacognitive skills, once learned and mastered, are likely to result in effective self-assessment, although different skills may be needed in different situations. Self-assessment, in and of itself, is a difficult task. But self-assessment can be practiced and learned, and we are going to do that in this course. I am going to start you off by asking you to assess how you engage with academic content, your peers, and your instructors, as well as what skills for learning, communicating and presenting you may have already developed. To do this, we are going to start with a questionnaire that was developed to study student behaviors as they engaged in Project based Learning. This questionnaire identifies many of the skills that will be required of you for this course. As you complete it, be thoughtful not only about your responses, but also about planning for practice in areas in which you are challenged, or in which you have struggled in the past. Pull your questionnaire out and look at it as we go through the course. While I am introducing it here so that you can appreciate those strategies and behaviors that will ensure your success in this course, I also would encourage you to use the questionnaire to assess yourself throughout.

Your next task is to complete the *Modified Wurdinger Questionnaire* (Wurdinger et al., 2020), located in the content for this module. Dr. Wurdinger has explored the development of life skills through Project based Learning (Meyer & Wurdinger, 2016), and he has granted

permission for us to use this questionnaire for this course; you can access his research using this tool through any search engine, and I want to encourage you to do so.

You will be facing some interesting challenges in this course, and I have found that drawing your attention to your own ability to control your outcome in this class is one of the best ways to help you to do well in it. Please be honest and open on the questionnaire. It is only for you. You will do it at the beginning, and then at the end of the course. This is your opportunity to start developing some self-assessment skills.

1.2.1 Independent Assignment: Complete the ==Modified Wurdinger Questionnaire==

1.3 Journaling and Self-Reflection

For each of you, a discussion board (DB) has been set up that is only yours. I want you to use this DB for documenting your thoughts about learning and growing and struggling and celebrating and creating amazing deliverables in this course. You will develop a unique and interesting working relationship with your team during the next 16 weeks, and I want you to reflect on that as well. You will also be surprised at how much you learn, and how much you and your teammates, together, can create. And when you feel like the learning curve is too steep and you can't take another step, write about that, too. Why? Because self-reflection is a proven growth and development tool and sometimes just putting your frustrations and feelings down on paper helps to give you perspective (https://positivepsychology.com/benefits-of-journaling/). For this module, you have explored metacognition, self-assessment - to include clinical self-assessment - which is an outgrowth of metacognition, and your own strengths and weaknesses. You are now ready to reflect on what you've learned. Your first self-reflection is an opportunity to talk about your thoughts regarding those topics, but also an opportunity for you to jot down your thoughts about the project that this course requires.

What are your thoughts? Are they positive? Negative? Do you think it will be fun or horrid? Somewhere in between? Do you feel equipped to take it on? Do you feel like you have a good team? Are you prepared to work with a team? This is where we start.

1.3.1 Independent Assignment: Complete your first Self-Reflection

This discussion board is private. Only you and the instructor can see what you write, the instructor will drop by to chat every now and again. If you use the DB to communicate something important, that you would like to be sure receives a response from the instructor, please alert him/her to view your DB via email.

__Module Two__: Introduction to the WHO International Classification of Functioning, Disability and Health

2.1 What is the ICF?

The International Classification of Functioning, Disability and Health (ICF) is a cataloguing system of health and health-related domains developed by the World Health Organization and officially endorsed in May of 2001 ("International classification of functioning, disabiltiy and health: ICF," 2001). It was designed, per its title, to be universally practical.

To fully grasp what a "classification of functioning, disability and health" is, it is important to unpack the terms used in the title of the system first. The ICF was developed as a classification system of health and health-related domains. It is intended to place the functioning and disability of an individual within the context of his/her environment. It has been endorsed as the international standard to "describe and measure health and disability" ("International classification of functioning, disabiltiy and health: ICF," 2001).

But note that the system's title first refers to functioning. What do we mean when we speak of functioning? For therapists, functioning is about how an individual uses his or her capacity to interact with the environment. Capacity, the ability to do something, is not interchangeable with function, the actual doing of it. For example, a person may be able to run two miles, in a pinch, say when being chased by a bear, but he may not run in his daily life at all. In the clinic, we may measure an individual's capacity to be one thing but note that he functions quite differently when at home. We'll dive into capacity and function more later. For now, appreciate that functioning may happen at an activity level or at a participation or role level, but these are usually connected.

A person can demonstrate function through specific activities – walking, carrying, hitting –
to engage in particular life roles – shopper, caregiver, baseball player. Individuals function
when they perform activities of daily living (ADLs) by brushing their teeth, dressing
themselves, and cooking meals and when they perform discrete tasks at their jobs. And they
function as members of communities, of families, of faith, and of society, in other words, in
roles. To make the leap from activity to role, appreciate that one must be able to participate
in the aspects (activities) of any given role to succeed in that role. For example, a woman
who is a mother (her role) must be able to effectively care for a child, to lift him and dress
him and feed him (activities).

Think about your roles. Can you list the physical or mental activities that you must be able to
do in order to succeed in one of them? If we think about just one role that you engage in –
student – you can start to list activities of organizing, planning, sitting, reading, writing, etc.
And you can perhaps appreciate that, unable to complete some of these activities, you would
struggle to be successful in your role. We'll dive deeper into the idea of capacity not always
translating into function, but for now, think of these topics something like this: a person is
able (she has the capacity) to perform an activity, which allows her to function within her
environment, and perhaps, within a specific role.

What about 'disability'? What is meant by that particular term? To understand disability, we
need to first understand ability. Ability, in its most generic sense, is the means or skill to do
something. In a more narrow, medical sense, it is aligned with the idea of correct, or at least
sufficient, function and physiology. Physiology, or function, is closely related to structure, or
form. So, let's go all the way back to the starting point of form. For example, your brain is
designed to think. Its function is to think. Therefore, its form is a collection of nervous tissue,

made up of neurons and glia, that communicate through neurotransmitters and electrical

synapses, so that cognitive processes – thinking - can occur. The structure, or form, of your

brain and mine, follows its function.[1] The brain has the *ability* that it has because of its form.

Form follows function, and a modification of form changes function or ability. In other

words, a change in anatomy due to injury or disease causes a change in the ability of a

structure to perform its function. It is likely to incur a *dis*ability. The same is true when there

is a negative change to a physiological process or function of an anatomical structure that

results in an inability to perform activities or participate in life roles. There is *dis*ability. A

disability can be any condition of the body or the mind that hinders a person's engagement in

functional activities, performance of their role(s), or interaction with their environment.

Function (physiology) dictates form (structure or anatomy). Function is ability. Damage to,

or modification of, function or form can result in disability.

Which leads to an interesting caveat regarding the concept of disability. It is not the same for

everyone. For example, if two people have shoulder injuries such as rotator cuff tears, and

one is a painter and one is a sedentary older woman whose only hobby is needlepoint, the

injury may result in a disability for the former individual, but not for the latter. If the painter

cannot raise her arm above her head, she may have difficulty returning to work and engaging

in her role as a painter. In that case, the shoulder injury has resulted in a disability. The

second individual (our needlepoint hobbyist) may heal enough that, while her range of

motion remains limited, it does not affect her daily life. For her, there is in effect, no

disability.

---

[1]Or does function follow form? Chicken and the egg, folks.

Perhaps the most interesting word in the ICF title is 'health'. Adding this word, and this facet, to thinking about people with illness, was fairly new to the scene when the WHO took on the development of the ICF. Perhaps for you as a reader many years after the ICF was adopted, this seems a bit odd. It is true that in today's healthcare climate, we are (often) thoughtful about preventive care and health and even ensuring that individuals are educated about wellness, but that is not the classical perspective of medicine. For a very long time in medical history the perspective of medicine was one that approached illness as episodic. In effect, people became ill or experienced a traumatic incident, medicine sought a remedy or cure, and the client either was healed or died. Chronicity (of heart disease or post-stroke disability, for example) was not necessarily a primary concern of medicine since there weren't very many chronic clients with multiple comorbidities around.

After WWII, when numerous soldiers returned to the United States and United Kingdom with disability, and as medicine improved and people survived what were previously terminal illnesses, that changed. Chronicity became a major part of medical care, and as you enter practice in healthcare, you will find that many of your clients/ clients have multiple diagnoses and may be taking many medications. Many of your older clients may be living with chronic conditions. And yet, these people are living with a degree of health. They are functioning in their environments and engaging in their roles. The ICF asks us to identify the positive ways in which they function, as opposed to identifying only their disability.

Another issue related to health that is foundational to the ICF is that we need to think about the client's condition within context. The ICF demands that we not separate the individual's diagnosis from his or her social environment, family and community relationships, and personal considerations. But here perhaps, is the concept that is the most important for us to

wrap our heads around: the fact that an individual may have a disability, but he or she is not his or her disability. If today I am a wife and mother and physical therapist, and this afternoon I am in a car accident and suffer a spinal cord injury (SCI), I do not wake up tomorrow a 'woman with a spinal cord injury'. Or at least I am not primarily a woman with a spinal cord injury. I am a wife, a mother, a PT, and I have suffered an SCI. You cannot remove from me my personal identity, my roles, my career. Now, this is different from saying that rehabilitation practitioners need to think about individuals with disabilities within the context of their environments. That's true, but it's only one consideration. This is saying that individuals with disabilities are not solely individuals with disabilities; they are individuals first and foremost. The disability is not who they are.

Now, beyond the title of the document, we want to explore why the ICF was created. The ICF was initially piloted in 1980 in order to present a standardized language and framework to be used by a wide range of users across multiple sectors to classify health and health-related domains. The domains addressed are intended to describe changes in body structure and function (anatomy and physiology), capacity (ability to perform tasks in a normal environment), and function and performance within an individual's specific environment. The ICF uses the term *functioning* to refer to all body functions, activities and participation, while it uses the term *disability* to refer to impairments, activity limitations, and participation restrictions. This contrasts with the traditional models used in rehabilitation, such as the Nagi Disablement Model (Jette, 2006) pictured below.

The Nagi Model starts with the idea of pathology and proceeds from there. For example, let's put into the Nagi Model a pathology of 'rotator cuff tear'. From that pathology, we can begin to predict what type of impairments an individual may present with. Impairments are performance limitations that can be objectively measured by a trained individual and that generally can be described with one or two words. We can predict that the individual with a rotator cuff tear may have limited range of motion, decreased strength, and pain. Based on those impairments, we can anticipate his functional limitations. Functional limitations, per the Nagi, are activities that an individual cannot perform due to his or her impairments. Perhaps he cannot lift his arm over his head, rotate his shoulder, carry anything heavy, reach out in front of himself, or push anything. Note that we are listing physical tasks without context. Let's put those tasks into context to see if they rise to the level of disability. Remember that not everyone has disability based on functional limitations. In order for a functional limitation to rise to the level of disability for an individual, the activity being referred to, the one that is limited, must be needed for his or her life role(s). Perhaps our client is a ball player. He now cannot play ball and so yes, he has a disability because he cannot pitch or swing a bat. Our model now looks like this:

Rotator Cuff Tear	Decreased ROM Decreased Strength Pain	Unable to lift, rotate, reach, push	Unable to engage in sport - ball playing

So, for many years and in many ways, this was a perfectly workable model for rehabilitation practitioners. As a medical model, it viewed disability as an inherent characteristic of the individual, that required intervention from professionals in order for said characteristic or disability to be alleviated. From this model, we could plan to treat and intervene at the level of the client's loss of range of motion, decreased strength, and pain (his impairments). Once

we were able to satisfactorily improve the client's impairments, we could focus on his

functional limitations, and from there his return to sport. By intervening in the person's

impairment or disability, the practitioner met the expectations of practice. The practitioner, or

expert, assessed and then treated the individual according to the assessment data. Pay

attention to the terms used in the Nagi Model. Can you recognize that they are all, in a sense,

negative? For example, the client's pathology leads to *impairment* or the loss of the ability to

perform a task, which leads to *functional limitation* or the inability to engage in activity,

which results in *disability*, the inability to perform in a role. This negative perspective allows

for the identification of points in the model where a practitioner can step in and treat. Can the

physical or occupational therapist intervene at the point of the impairment? The functional

limitation? What about teaching compensatory strategies to decrease the effects of these, in

an attempt at alleviating disability?

But this is a purely medical model. Or at least, it leads to medical thinking. Note that

nowhere in the Nagi Model does the practitioner consider the context within which the client

lives and functions, other than when deciding whether functional limitation leads to

disability.[2] And, nowhere in the Model does the practitioner ask what the client's strengths

are or give him room to be the expert in his own care.

Remember too, that the Nagi Model is, ultimately, not intended to be used as a classification

system. Nagi's Model is a model that seeks to identify the gap between an individual's

capacity and abilities and the demands created by his or her roles. In other words, it identifies

the person's limitations as related to his or her defined roles and recognizes those as his or

---

[2] There is no doubt that practitioners have always thought about clients more holistically than is represented here; however, this is not due to use of medical models, but to the application of heart and empathy, as well as good practice principles.

her disabilities. A medical model, in the sense that it can assist in clinical reasoning, but not a classification system.

The ICF? It has replaced the Nagi Model for the purposes of delineating the concepts of functional limitations and disability, and it is a classification system and a biopsychosocial model[3]. But more than that, the ICF was designed to shift the focus away from the gap between what people could do and what they needed to do, to how they could function within their environment. In other words, instead of looking at people as lacking in ability, it assesses people's *abilities*, their health, and includes an evaluation of their environment. And, as opposed to the Nagi, which is applied beginning with a specific diagnosis or pathology, the ICF can be applied to everyone, since everyone has differing abilities, and everyone experiences some disability. It recognizes disability as universal, as an aspect of the human experience. Stop for a second and think about yourself. Do you, in some situations, experience disability? I am 5'3". I experience some disability when I try to reach things that are too high. I am uncoordinated and suffer disability when I try to engage in sports or any other activities that requires coordination. I even seem to have some sort of planning or praxis difficulty (I'm incredibly clumsy), and sometimes have some disability with figuring out how to solve mechanically based problems. They overwhelm and frustrate me, and I will quit them or avoid them. What are your disabilities? What are your abilities?

2.2 What does the ICF Classify?

In a nutshell, the ICF classifies functioning and disability associated with health conditions. The ICF does not distinguish between health conditions (i.e., ataxia due to Parkinsonism vs. ataxia due to cerebral palsy), it does not place health conditions into a hierarchical continuum

---

[3] It considers the whole person. More on that later.

(i.e., a spinal cord injury is more deleterious than diabetes), and it does not differentiate by etiology (i.e., a congenital disease is different than an acquired disease). In other words, it does not attempt to place people with different conditions into categories based on those conditions, nor does it categorize diseases by cause. It also doesn't attempt to prognosticate based on diagnosis. It does not primarily concern itself – and therefore it asks that the provider not primarily concern him- or herself, with the diagnosis first and foremost. Instead, the ICF is concerned with function. The individual is classified by his or her function. For example, he can only walk short distances and therefore cannot locomote ad lib within the community, or she cannot communicate her needs to others. Since these limitations could be the result of any of several disease conditions, all possibilities are of equal consideration. While the medical model considered disability a problem of the individual, a social model considers disability because of socially created limitations. Social models examine social, cultural, political, and environmental factors that may impact an individual's health and wellbeing. Social models, as compared to medical models, include the individual's environment, and certainly see the client more holistically than medical models do, but they have generally not been widely adopted by medical practitioners (Hogan, 2019).

The ICF seeks to merge medical and social models and is therefore called a biopsychosocial model. It does not replace the medical model, nor the social model; it merges them. The ICF classifies health and function in a multi-dimensional manner across the lifespan. It recognizes that disability occurs within the context of self, family, and society, and it synthesizes these and records both the positive and negative features of their interaction. Can it be useful clinically? Yes. But the intention behind its development was not solely to create a clinical, or medical, reasoning framework.

It should be noted that there are many clinicians who are using the ICF as a clinical reasoning tool, in much the same way that the Nagi was used - to identify where the therapist can intervene and provide treatment that remediates or compensates for impairment or activity limitations. This is a function of clinical reasoning from experience, training, and practice, and a use of the ICF from the medical perspective, with inclusion of its social and psychological considerations. It is the process of extrapolation from information collected, but not necessarily a comprehensive use of the ICF. Remember, the ICF is a classification system. In the next section, we'll explore that more fully.

The ICF is represented by the following diagram:
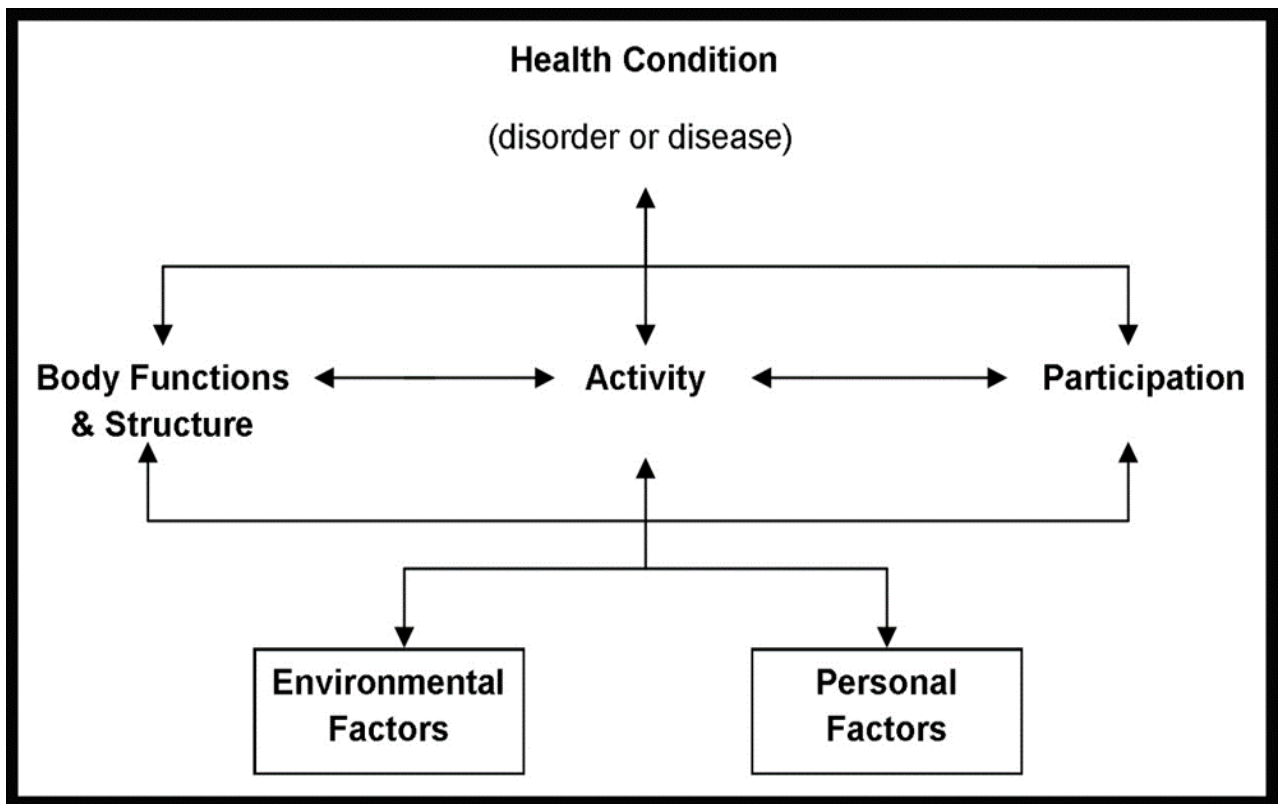
As you look over the diagram, note the differences between the biopsychosocial model of the ICF and the Nagi Model, presented earlier. The ICF, as cited above, merges the medical model (health condition, body structure and functions, and activity [the inverse of

impairment] and participation [the inverse of functional limitation with the added facet of interaction with others and society]) with the social model (environmental factors and personal factors). Consequently, it is a more all-inclusive model.

2.3 What resources does the WHO offer to support my exploration of the ICF?

The World Health Organization has provided several resources for the public regarding the ICF. You have links to all of these in the Learning Management System. They can all be found at: https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health. From the WHO ICF homepage, a learner can find the ICF Checklist, the Beginner's Guide, the Practical manual, and all ICF Official Updates. In addition, there are links to educational sites and tools. There is an ICF eLearning Tool, ICF Education Portal, and the ICF Core Sets Online. Please go to the link and dive into the eLearning Tool and complete the modules found there.

The ICF Beginner's Guide (https://cdn.who.int/media/docs/default-source/classification/icf/icfbeginnersguide.pdf?sfvrsn=eead63d3_4) states, "Because of its flexible framework, the detail and completeness of its classifications and the fact that each domain is operationally defined, with inclusions and exclusions, it is expected that ICF, like its predecessor, will be used for a myriad of uses to answer a wide range of questions involving clinical, research and policy development issues" (pp. 5-6). The Guide includes the following suggested Applications of the ICF (2002):

Service Provision

At the individual level

• For the assessment of individuals: What is the person's level of functioning?

• For individual treatment planning: What treatments or interventions can maximize

functioning?

• For the evaluation of treatment and other interventions: What are the outcomes of the treatment? How useful were the interventions?

• For communication among physicians, nurses, physiotherapists, occupational therapists and other health works, social service works and community agencies

• For self-evaluation by consumers: How would I rate my capacity in mobility or communication?

At the institutional level…

• For educational and training purposes

• For resource planning and development: What health care and other services will be needed?

• For quality improvement: How well do we serve our clients? What basic indicators for quality assurance are valid and reliable?

• For management and outcome evaluation: How useful are the services we are providing?

• For managed care models of health care delivery: How cost-effective are the services we provide? How can the service be improved for better outcomes at a lower cost?

At the social level…

• For eligibility criteria for state entitlements such as social security benefits, disability pensions, workers' compensation, and insurance: Are the criteria for eligibility for disability benefits evidence based, appropriate to social goals and justifiable?

• For social policy development, including legislative reviews, model legislation, regulations

and guidelines, and definitions for anti-discrimination legislation: Will guaranteeing rights improve functioning at the societal level? Can we measure this improvement and adjust our policy and law accordingly?

• For needs assessments: What are the needs of persons with various levels of disability - impairments, activity limitations and participation restrictions?

• For environmental assessment for universal design, implementation of mandated accessibility, identification of environmental facilitators and barriers, and changes to social policy: How can we make the social and built environment more accessible for all person, those with and those without disabilities? Can we assess and measure improvement?" (ibid., p. 6)

Please go to the *ICF Beginner's Guide* and read beginning on page 6. Explore some of the uses of the ICF in more depth. Compare and contrast the potential uses of the ICF with the intended use of the Nagi Model. Hopefully you can appreciate how the ICF's different perspective allows for a more complete view of the individual who has a disability.

2.4 Chapter Activities

2.4.1 Independent Learning Activities Links

2.4.1.1 ICF Resources –

- World Health Organization ICF Home: https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health

- Rehadat Link: https://www.rehadat-icf.de/en/

2.4.1.2 Toward a common language of disablement –

a) Toward a Common Language of Disablement:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759568/

2.4.2   *The medical vs. biopsychosocial model* (DB)

Article: Medical vs. Biopsychosocial Model – The New Old and the Old New:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5746722/

Discussion Board prompt for *The Medical vs. The Biopsychosocial Model DB*: What are

the elements, in your opinion, that most clearly differentiate the two models? What do

you think are the strengths and weaknesses of each? Please complete one original post

and two responses. Don't forget to cite your sources in APA 7th ed. format.

2.4.3   *Independent Assignment:* eLearning Attestation

Go through the modules provided at the ICF e-learning tool website. There is no way to

demonstrate that you have completed these modules. Therefore, please write a quick

attestation when you're done. Submit this via dropbox!

ICF e-learning Tool: https://www.icf-elearning.com

2.4.4   *iRAT/tRAT*

2.4.5   *Application Activity: ICF Categorization (Sorting) Activity*

Application Activity instructions and link to Creately: Thinking about your client group,

select one relevant Body Structure and Function that might be of concern. Using the ICF

website and the Rehadat website, build out a sample ICF model diagram of your

imagined client's situation. Be creative, but also try to be intentional regarding the

specific elements that belong in each square representing categories of the ICF

Framework.

Creately link: https://creately.com/diagram/example/ior6gnm43/WHO%20ICF

If this flowchart cannot be accessed via the link, perform a Google search for "creately AND icf AND flowchart".

Module Three: Body Structure & Function

3.1 Anatomy & Physiology – Structure & Function (Exemplar Assessment: *Orthopedic Assessment for the Upper Body* @ Kanopy: https://etsu.kanopy.com/video/orthopedic-assessment-upper-body)

It is probably safe to say that everyone who is studying to join one of the rehabilitation professions has a pretty good understanding of the definitions of 'anatomy' and 'physiology'. Anatomy is the study of body structures and relationships between body parts, and physiology is the study of how those structures work. If the structures (the anatomy) that we are talking about are working (the physiology) correctly, they are functioning (again, physiology) according to their design (anatomy or form). So, form follows function. Anatomical structure can be understood through an appreciation of the physiology of that structure, and as long as everything functions, we can say the structure is functional. Pathology is the study of the causes and effects of diseases, and the term pathophysiology adds the study of pathological function, or dysfunction. So, whereas physiology is the study of normal function; pathophysiology is the study of derangement of that function. When or where there is derangement, there is the likelihood of dysfunction. I say likelihood because, while beyond the scope of this text, medical practitioners know that there are cases where derangement is present, but no dysfunction is readily apparent. These are termed anomalies. If we accept that this is our framework for thinking about body structures and functions (that form follows function, and that derangement of function results in dysfunction), then we can, with the right understanding of anatomy and physiology, appreciate what happens when there is dysfunction. For example, the left side of the heart pumps blood out to the systemic circulation. To do so efficiently, it matches its output against the after pressure of blood

pressure (BP) in the system. When blood pressure is high (a derangement), after pressure increases and the heart has to pump harder. The left ventricle eventually, if the BP is not corrected, responds by growing larger and stronger (hypertrophy), which is a way of attempting to get more blood out to the system. Hypertrophy, however, decreases the space in the left ventricle for blood filling, consequently decreasing output. The heart's system of pumping blood becomes dysfunctional. Derangement leads to dysfunction. So, we have a chain of events that results from dysfunction, and from there we can start to predict what might happen next, on a cellular, tissue, or system level.

You are being provided a link to an assessment for this module that is representative of assessment of structure and function (https://etsu.kanopy.com/video/orthopedic-assessment-upper-body). In this case, the practitioner can be observed assessing the structure and function of the upper body through measurements of range of motion, weakness, pain, and functional activities. Note that, although he mentions possible pathologies and diagnoses, he does not use a diagnosis as a guiding principle per se. Instead, he is interested in assessing the body structure and function as they present to him.

Now let's apply the ICF Model to these ideas. In the ICF, as a header, we still have the health condition, or pathology. The *ICF Practical Manual* (https://cdn.who.int/media/docs/default-source/classification/icf/drafticfpracticalmanual2.pdf?sfvrsn=8a214b01_4) defines the health condition as "diseases, disorders, injuries or related states" (p.6). These are classified in the International Classification of Diseases (ICD), another publication in the family of WHO references. The ICF is not associated with specific health problems or diseases (as opposed to the ICD), but instead describes the associated functioning dimensions that result or are present for the individual. Remember that the ICF is function-based.

Beginning in the second level of the ICF, we have Body Structure and Function, and we want to think of these as parallel to anatomy and physiology. Perhaps at this point an example would be helpful. Let's go back to our client/client with a rotator cuff tear. For his body structure and function, the structure would be rotator cuff muscles (structures related to movement: muscles of shoulder region), and the function would be sensation of pain, mobility of joint functions, muscle power, etc. Notice that the ICF does not dwell on health condition at all, and that the identification of body structure and function is relatively generic. In other words, we cannot necessarily draw a cause-and-effect arrow from the health condition to the structure and function like we could with the Nagi Model. Here, what matters is the individual client's structure and function, not the general "this applies to all rotator cuff tears" kind of flow chart. So, if you were trying to take information from the Nagi for a specific individual and use the ICF with that information, you would sort of be stuck after health condition, unless you could assess or evaluate the actual client. In other words, the ICF is not designed to encourage experientially based extrapolation. Healthcare providers assess the anatomy and pathology, or body structure and function, of their clients all the time. For example, physical therapists assess the extensibility of muscles, the mobility of joints, and the endurance of the heart and lungs in addition to a myriad of other anatomical structures and their function. Occupational therapists assess similar items for the upper extremity, and assess handwriting, memory function, and grasp – very functional skills – as well. Speech pathologists assess swallowing and speaking, and comprehension of the spoken word.

3.2 Pathophysiology as a Predictor of Function

When we explored the Nagi Model, you saw that we can use that model to follow a pathway from pathology to predicting impairments and functional limitations, and in a general sense, even to disability. The ICF is not intended to, and should not, be used that way. The reason for this is that the ICF is intended to allow categorization of an individual's functional status, not of his/her pathology, and as stated earlier, effectively puts all pathologies on a level playing field – no one pathology is considered hierarchically more severe or less severe than any other.

It is still useful for us though, particularly as we move into the next chapter/module, to appreciate that pathology may be a predictor of function, at least in a general sense. For example, if a practitioner knows that a client had a recent hip fracture that has been surgically repaired, she can reasonably predict that there may be pain, a loss of range of motion, edema, and limited mobility following the surgery. As another example, if a child has severe hemiplegic cerebral palsy, the therapist can expect to see decreased use of the involved side, and if the diagnosis indicates tone issues (e.g., spasticity or flaccidity) there are additional movement disorders that may be expected. It is impossible for a therapist or other medical practitioner not to lean on heuristics to make decisions about clients – in this case the representativeness or availability heuristics. With the representativeness heuristic, an individual makes quick judgements based on a cognitive or mental prototype. At its best, the representativeness heuristic allows for a quick decision based on an existing prototype or typical example of a particular object, event, or person.

The availability heuristic leads us to believe something is more likely than it is, particularly if we can name or think of several incidents of that occurrence. For example, if the last five clients that one saw had the flu, it is more likely that a practitioner will think that the next

person with fever and cough has the flu. He or she may overlook other options or possibilities and completely miss that the client, recently returned from an overseas trip, has tuberculosis.

Heuristics are short cuts that allow us to think quickly and interact with the world without having to engage in deep processing and reasoning with every situation. In that regard, heuristics are helpful. When they are not helpful is when they result in stereotypes or a failure to note differences in the situation or person in front of us. For therapists, we can use heuristics effectively, if we are able to self-monitor to ensure we are not relying too much on them. The ICF asks that we step out of the predictive medical model and see the client in front of us, especially as related to function within his/her environment. But should we abandon heuristics (and prediction)? Not only would that slow our processing significantly, but it is also possible that we can't do it. Heuristics are inherent in the way we're wired to approach and solve problems. So, while experience and history allow for prediction of functional limitations prior to our introduction to the client, we must be careful to ensure that we are also using observation, interaction, and assessment to make good client care decisions.

As we start into the deliverables, you will find that I am asking you to use prediction, but not for an individual client. Instead, as you and your team begin development of your program, you will use prediction to anticipate the needs of the client group that you have been assigned. Start by thinking about the body structures and functions – the anatomy and physiology – most likely to be affected by the client group diagnosis. From there, ask if there are specific body structure and function inclusions that you feel you can address with your program. This will be your foundational deliverable, in that it will be the one in which you

and your team develop an understanding of your client population, answer key questions about the diagnosis you've been assigned, and start to develop an appreciation for all the ways that your client group is unique. Do this deliverable well, and you will have established a strong foundation.

3.3 Chapter Activities

3.3.1   Independent Learning Activities Links

3.3.1.1 Exploring assigned diagnoses/disabilities

As a member of the profession to which you have been assigned, and as a member of your team, start exploring the diagnosis of the client population with which you will be working. As a team, ask key questions: What do you need to know? Where can you find information? How do each of the professions typically engage with these clients? You will return to your team with an individual deliverable, which will include all the information (artifacts) that you feel are important to add to your team's first deliverable.

3.3.1.2 ICF resources for body structure and function, from WHO and at: https://www.rehadat-icf.de/en/klassifikation/

The Rehadat website will allow you to get a good overview of how different elements of the ICF are categorized. Explore! Follow the tabs through body structure and function and think about how each item applies to your client population. Build your outline for your first deliverable here. For example, if you are going to work with children who have difficulty with (under body functions) articulation functions due to cerebral palsy, you could follow that to find out that ataxic dysarthria was included here. Then, you could go back to body structures,

and, under structures of the nervous system, find that it is likely that the

appropriate ICF category for this is structure of the cortical lobes. Thinking about

your client population, you know that you need to think about brain involvement

and speech issues, and how you will address them in your assessment and

program.

3.3.2   Defying Expectations (DB)

Discussion Board prompt for *Defying Expectations DB*: Please go to YouTube and

explore a medical pathology or diagnosis that interests you (it does not have to be the one

your team has been assigned). Locate a video that has been posted by an individual who

has been diagnosed with the disorder you've selected, but who has defied the

expectations of that diagnosis. Here is an example of what I mean:

https://www.youtube.com/watch?v=tJnJ_fTYofQ. In the Discussion Board, discuss: in

what way(s) were you surprised by the individual portrayed in the video? Did you have a

reason for your surprise? In other words, where did you get your preconceived ideas of

what was expected of an individual with your chosen diagnosis? Are you able to identify

your own biases regarding these individuals? Do you think that your biases are common

among members of your community? Among members of society in general?

Please complete one original post and two responses. Don't forget to cite your sources in

APA 7th ed. format.

3.3.3   iRAT/tRAT

3.3.4   Application Activity: Body Structure & Function Deliverable 1

3.3.4   Independent Assignment: Complete your second Self-Reflection AFTER

turning in the Deliverable

Use this opportunity to reflect on your engagement with your team prior to completing and receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: Now that the first deliverable has been submitted, what are your thoughts about how it developed and came together? If positive, in what way? If negative, in what way? What were some of your most challenging moments and what made them so? How do you feel you, and your team, did in terms of communication? When did your collaborative communications fall short of the team's expectations, if ever?

3.3.6 Complete your first ==PEER REVIEWS== AFTER turning in the Deliverable

Module Four: *Activity and Participation*

3.1 What is an activity? What is participation?

(Exemplar Assessments: Gross Motor Function Classification System – Expanded &

Revised:

https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-

ER_English.pdf and the Functional Independence Measure available from physiopedia.com:

https://www.physio-pedia.com/Functional_Independence_Measure_(FIM))

The *ICF Practical Manual* (https://www.who.int/classifications/drafticfpracticalmanual.pdf)

describes Activity as "actions and tasks executed by individuals" while Participation is

"involvement in life situations". Activities range from tasks that can be identified by a single

word or brief term (e.g., walking, learning, and speaking) to more complex tasks like

engaging in ADLs. Participation supposes interaction with others or the environment, such as

interpersonal communication, engagement in work, and engagement with the community. At

first blush, these may seem to nearly be the same thing, or at least, it could be argued that

there are ways in which they overlap. It is perhaps useful to appreciate the idea of one word

or a small group of words as a designator of an activity vs. the combinations of activities that

result in participation, but that might not always hold true. Debating is certainly participation,

its one-word description notwithstanding. Participation, as opposed to activity, includes more

than one task or action, and is a life situation. One might, for instance, work in an office to

process data. This would certainly represent an example of a life situation – participation.

This participation would include multiple elements (activities) such as organizing the

environment, managing stress, encoding data through writing, and typing, and interacting

with others. Ultimately, every task or activity, if engaged in while in a social environment,

can be considered participation. Sewing might be considered an activity; sewing in a quilting club would be participation. The ICF covers all aspects of life, ranging from the very basic (e.g., walking) to the very complex (e.g., participating in school), and allows some flexibility in gauging whether an action or task is an activity or participation for any client.

The ICF presents the nine domains of activity and participation in one list, but this list combines multiple domains. Domains 1-4 may be considered activities, and 5-9 considered participation. But there are other ways to divide these lists, as well. One could choose to regard domains 1-6 as activities, and, with some overlap, domains 3-9 as participation. Finally, all first and second level categories within the domains could be considered participation, and all categories at higher levels as activities. Within the activities and participation domain, the ICF includes domestic life, relationships. work and education, leisure activities, learning and thinking, coping strategies, communication, mobility, and self-care. Regardless, we need to remember that the ICF is a categorization system, and so, when selecting a category set to describe an activity or participation, the clinician should choose the one that best represents the different critical activities required for the given client.

In practical application[4] of the ICF, one must bear in mind some additional elements of both activity and participation. These elements include considering whether one can perform without human assistance or if assistance is needed, how much assistance is needed, and whether the presence of modifications to the environment, assistive technology, or other features require (or result in) a modified evaluation of the individual's activity or participation. Let's look at each of these a little more closely.

---

[4] By practical application, I am referring to using the ICF for clinical or research decision-making.

First, is assistance needed? Rehabilitation therapists do not always focus only on return to

prior level of function, although that is often, the goal of intervention. Instead, for many

clients, a return to prior level of function may be impossible or may require too much energy

for the client or be unsafe, and so the environment or task must be modified, or some

assistance must be provided to enable the individual to maximize his/her independence. So, a

therapist and client may set a goal of performing the task with assistance, in a modified

environment, or both. In that case, it can be said that the goal of intervention is

compensation, as opposed to rehabilitation. Assistance is labelled according to accepted

values as follows (https://integrisok.com/-/media/pdf/therapy-students/fim-manual-

pdf.ashx?revision=443ff8bb-2e9c-4e05-ae07-

962e932fc21b&la=en&hash=CCC068DE5BDC223532D9445C6EEBA9D1BFA15567):

Locomotion: Walk or Wheelchair, to be scored on level surfaces.

7	Independent Walks >150ft	Does not need help or any modifications.
6	Modified Independent Walks >150ft	Needs assistive device, equipment, pads, or medicine.
5	Supervision/Set-up Walks >150ft	Needs cuing, coaxing or assistance to set up equipment.
4	Minimal Assist Walks >150ft	Needs incidental assistance such as contact guard
3	Moderate Assist Walks >150ft	Needs physical assist for 50-74% of task.
2	Maximal Assist Walks 50-149ft	1-person Max physical assist (performs 25-49% of task).
1	Total Assist Walks <50ft.	Walks less than 50ft and/or 2-person assist <25%.
0	Activity Does Not Occur	Enter only for admission assessment.

The other possible modifications to consider are modifications to the environment and

assistive technology. Modifications to the environment can include anything from a ramp at

the front of a home or grab bars in the shower to moving a bedroom from upstairs to down to eliminate the challenge of steps. Modifications are often made to permit an individual to return to the home environment when he/she otherwise might not be able to and serve to both increase independence and safety.

Assistive technology is the umbrella term for all the systems and services related to those products that are provided to an individual to maintain or improve his/her functioning and independence. These systems can include low and high tech, such as walkers, manual wheelchairs, hearing aids, diabetic shoes, and text to speech software. In fact, we all use assistive technology every day. And we use it for the same reasons that our clients do; for us, however, technology is often about convenience, whereas for clients, it is about function and independence.

While assistance, task modification, and assistive technology are not currently differentiated by the ICF, they may be in the future.

4.2 Nagi vs. ICF Language

The comparison of the Nagi and ICF models can be continued in the activity and participation domains. Jette, in his article *Toward a Common Language of Disablement*, (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759568/) created a chart comparing the language used by the Nagi and the ICF (Jette, 2009). This article is available in your module resources, and we first encountered it in Module 02. I encourage you to read now if you didn't read it previously, and to spend some time developing an understanding of Table 1. In summary, Jette (2009) equates the Nagi concept of pathology with the ICF concept of health conditions, the Nagi concept of impairment with the ICF concept of body structure and function, Nagi's functional limitation with ICF's activity and activity limitations, and Nagi's

disability with ICF's participation and participation restriction. We learned earlier that the

ICF's language is intended to be positive, or the inverse of disability-focused language. Can

you see how this is the case when comparing these two models?

It should be noted that the Nagi assesses disability as a relationship between functional

limitations and the individual's life roles, while the ICF proceeds from this point in the model

to further evaluate environmental factors and personal factors, which is presents as

contextual. So, for the Nagi, a practitioner considers the client's impairments and functional

limitations within an environment that is focused on the client's reported roles. The ICF

requires an added level of consideration, that of the context within which the individual lives

and acts. It requires the articulation or description of the relevant elements of the

environment, and of the individual, that may either worsen or mitigate any given impairment,

activity limitation, and participation restrictions, resulting in a clearer picture of the

individual's strengths and challenges and an opportunity for comparison of his or her

capacity and function. For the ICF, the context within which the individual must engage with

his or her environment, and the supports or lack of supports in that environment, are

paramount.

4.3 Capacity vs. Function

Please go read the following article, _Physical activity is associated with functional capacity_

of older women with osteosarcopenic obesity: 24-month prospective study, found at:

https://pubmed.ncbi.nlm.nih.gov/31551532/ (Dos Santos & Gobbo, 2020).

When rehabilitation practitioners discuss capacity, they are referring to a client's abilities.

What they generally are not referring to is a client/client's actual function. These two have

the potential of being vastly different, and for many clients, are at least slightly different.

Capacity is what an individual *can* do, while function is what he or she *actually does* in a real-world environment. In the most general terms, we could say that an assessment of a client reveals that he or she can lift upwards of say, 70 lbs. In the clinic, he lifts 70 lbs. and then puts it down without injury or difficulty, and so we have an assessment of his capacity to lift 70 lbs. However, do we really know if the client will choose to lift 70 lbs. in the work environment? Do we know that he lifts 70 lbs. at home? Or at work and home, does he perhaps consistently limit what he lifts to 50 lbs.? If so, then the ability to lift 50 lbs. is his demonstrated function. There is a difference between his capacity and his function.

Another place in therapy where this sometimes shows up is in pediatric therapy. Nearly every therapist who works primarily with children can relay a story wherein parents report that a child does not do at home what he does in the clinic, or vice versa.[5] Pediatric therapists learn early that video is the best way of truly assessing a child's function – video in the clinic, and video taken by family at home. Therein, an actual assessment can be made of the child's capacity and of his function within his everyday environment.

Why does this happen? There are several reasons. First, clients try to do what their therapists ask of them, particularly during a functional assessment.[6] This is human nature, of course, to want to do well on an assessment, particularly if we are being assessed by someone to whom our performance is important, but additionally, there is a good bit of a person's identity tied up in assessment outcome. Think about your own desire, as a student, to do well on quizzes and tests, and to please the assessor (generally, in this case, the instructor). Differences

---

[5] In fact, this is probably true of all parent report, and not just that of the parents of children in therapy.
[6] I should note here that, in class, I often get questions about malingerers and Workers' Compensation clients. As a rule, I do not believe that people who come to therapy are malingerers, no matter who is paying for therapy services, or how the individual was injured. In my experience, always assuming that the client is truthful is the best policy, ensures a good rapport between therapist and client, and creates the best possible therapeutic alliance.

between capacity and function do not always present, and they are not always relevant to our

clinical decision-making, but there are times when we must think about what our client will

do at home, in an everyday environment, as opposed to what we see in the clinical setting.

4.4 Learned non-use and other challenges

One of the challenges that we encounter as practitioners is learned non-use. We've discussed

the gaps that may exist between capacity and function, and now should consider one of the

cases where that gap becomes somewhat fixed. Learned non-use is a phenomenon wherein a

client who can perform an activity doesn't for any one of several reasons. Please go and read

the article *The learned nonuse phenomenon: Implications for rehabilitation* (Taub et al.,

2006) in preparation for this module's discussion board. This article is free and available at:

https://www.minervamedica.it/en/journals/europa-

medicophysica/article.php?cod=R33Y2006N03A0241

4.4.1 Constraint-Induced Therapy (DB)

After watching the *Introduction to CIMT* video

(https://elearn.etsu.edu/d2l/le/content/8474697/viewContent/69679124/View) in this

module, find a time when you can experience something moderately similar for yourself.

While you obviously will not have experienced a stroke, I want you to wear an oven mitt

on your dominant hand and constrain the use of your dominant arm by wrapping it

against your body with an ace bandage wrapped around your trunk and hidden under your

sweatshirt (it will look like you have no arm) while you go about your daily activities -

for one full day. At the end of the day, in the discussion board, debrief your response to

the activity. How do you think a client who has lost full function of a hand, leg, or up to

half of their body feels? This is represented by a loss of the ability to engage in activity and, by extension, participation with their environment.

This assignment requires that you submit a minimum of ten photos of yourself throughout the day, engaged in different activities. Since photos are required, you may elect to submit this as a PowerPoint, or in any other photo-friendly format that you can think of, up to and including sending it to my email.

4.5 Assessment of function

We have previously explored assessment of body structure and function, for this module, we will explore assessment of function. When practitioners assess function, they are likely either assessing activity/task engagement and drawing conclusions regarding capacity, function, and participation, or they are assessing functional activities that are representative of overall functional participation. For example, navigate to the *GMFCS – E&R*, for which you have a link in the content for this module. We are starting here because this is a tool that is easy to approach and understand. The GMFCS E&R is a classification system, like the ICF. Note that you have available to you on this website a video that demonstrate what children in each of the five categories can do, and how they present clinically. What I want you to note about this classification system is: 1) it is clearly based on the ICF model; 2) the developers of the system identify specific activities to assess, and which children are expected to perform to be classified within each level; and 3) how activity limitations may result in participation limitations. Please watch the video and note where activities end, and participation begins. Read the description of the GMFCS and identify that its focus is to determine which level best represents the child's present abilities with an emphasis on function in the environment vs. the child's capacity. Notice that the GMFCS does not judge quality of movement or

prognosis, only if the movement is performed. And finally, it is not intended to be used to describe outcomes, for instance, outcomes due to therapeutic intervention, results due to intercession. The take home on this information is that classification systems may sometimes serve to identify and determine an individual's activity and participation and have some relevance for assigning individuals to treatment groups.

Now let's look at an assessment of activity. The *Katz Index of Independence in Activities of Daily Living* (https://www.alz.org/careplanning/downloads/katz-adl.pdf) is an assessment questionnaire that is used to measure a client or client's ability to perform activities of daily living independently. Let's look at the pluses of a simple activity assessment such as the Katz Index. First, it is easy to understand and to use for any level healthcare provider; second, it is brief, and still likely to identify problems with performance of ADLs; and third, it is free and readily available. These are not negligible pluses, especially if a practitioner is primarily interested in screening to see if a full evaluation is necessary. The Katz Index, however, has some very important negatives, primarily associated with its lack of reliability and validity and its ability to assess complex activities or participation.

Now go and take a look at the *Self-Care Assessment* (https://socialwork.buffalo.edu/content/dam/socialwork/home/self-care-kit/self-care-assessment.pdf) developed by TSI/CAAP and adapted by Lisa Butler. This is an assessment that is wholly focused on participation. While you could and should be able to identify the activities that make up each of the participation items in this assessment, the actual items are at a high level and consequently are participation related. Would this assessment give the individual completing it information regarding only categorization or information with more breadth? Would it measure change? Could it be used for prognosis? What do you think are its

strengths and challenges? Can you find information about its reliability or validity? If yes,

how does that inform your possible use of the tool? If no, how does it inform your use?

Another assessment worth exploring is the _FIM_. Please open the _FIM Manual_

(https://integrisok.com/-/media/pdf/therapy-students/fim-manual-

pdf.ashx?revision=443ff8bb-2e9c-4e05-ae07-

962e932fc21b&la=en&hash=CCC068DE5BDC223532D9445C6EEBA9D1BFA15567).

There is a lot to unpack here, and the FIM serves as an exemplar of a functional assessment.

Let's work together to assess this assessment (you will do this independently with another

assessment later). First, review the material located at the _Psychometric Properties_ link

(https://www.physio-pedia.com/Psychometric_Properties).

Next, locate and read an article about the FIM, selecting one that is related to its psychomotor

properties, if possible. For our assessment in class, in the interest of time, we are going to

review the FIM's psychomotor properties by visiting https://www.sralab.org/rehabilitation-

measures/fimr-instrument-fim-fimr-trademark-uniform-data-system-fro-medical and reading

through the Shirley Ryan Ability Lab's rehabilitative professional associations'

recommendations based on their research. Note the multiple ways in which the FIM has been

verified. Can you match these up with the terms/concepts in the Psychomotor Properties

document?

4.5.1 Objective vs. subjective; norm vs. criterion-referenced; self-report vs. observed

There are several terms that you should familiarize yourself with as we think about

rehabilitative assessments. They are:

- objective vs. subjective – An objective assessment requires a skilled, trained person

  for observation and grading. It is based on observable, measurable facts. A subjective

assessment is based on a person's feelings or perceptions. An objective assessment should be repeatable by different raters (interrater reliability) and by the same rater on a different day (intra-rater reliability).

- norm vs. criterion-referenced – Norm-referenced tests compare those being assessed against a group that is considered normal or typical for that age, gender, condition, etc. Criterion-referenced tests measure performance against criteria, for example they measure how many steps walked, how many times a person jumped, how much weight a person lifted. Criterion-referenced assessments are not compared to a norm or standard. Norm-referenced assessments are good for determining how far from normal a person's performance is, and for setting goals for rehabilitation. We would select a norm-referenced assessment primarily when engaged in rehabilitation for a client who has suffered trauma or injury, for whom we are seeking a return to function.

  We would select a criterion-referenced assessment in cases where we don't anticipate an individual performing in a typical manner, for example, with a child with a chronic condition (e.g., cerebral palsy), or when we are engaged in compensatory rehabilitation (e.g., post-spinal cord injury). In those cases, we are seeking maximal independence and function, but not necessarily "typical" or "normal" function. For the purposes of goal setting in those cases, it is much more relevant to set goals for the individual's highest function as related to their current function (their performance against a criterion), than it is to set a goal based on typical performance.

- self-report vs. observed – This is self-explanatory, but what is important here is that one – self-report – is more likely to be inaccurate, and one – observed – is more likely

to give a truer picture of what an individual can do. Both matter and both are important. For some elements of rehabilitation, self-report is critical. For example, we rely heavily on self-report for measure of quality of life, well-being, pain, and confidence with movement. For those, there is no observation that would serve to provide accurate data.

4.5.2   Independent Assignment: ==Assess an assessment==

Review the material at the Psychometric Properties link. Then locate and read an article about a rehabilitation assessment and its application to a group of clients.

Using the following terms: "reliability", "validity", "rehabilitation", "assessment", and "tool" along with a term that indicates your assigned professional membership for this course (e.g., "physical therapy") perform a search that identifies and discusses at least one rehabilitation assessment tool.

Answer the following questions:

1) To what type of reliability and validity, if specifically referenced, does your article refer?

2) What is the tool's reliability? What is its validity?

3) What might decrease the tool's validity? It's reliability?

4) Reference your article in APA format.

5) Finally, for this part of the assignment, discuss the tool in relation to the ICF model. With what specific aspects of the ICF model is the tool concerned?

Now, think about a question that you would like to ask about a client population you might see in the future, and then seek out an assessment that might be useful (try a Google Scholar search or a university library search). Then discuss below: does your

question lend itself best to a subjective vs. objective assessment tool? WHY? A norm-referenced or a criterion-referenced tool? WHY? Did the tool that you found have good reliability? Validity? Generalizability? How do you know? Can you defend your statements?

Please answer ALL the questions asked here. You can work in pairs. Put both names in the body of the post.

4.6 Values-based Participation

When we are working with people, particularly with something that is challenging to them, as we are in rehabilitation, we must recognize that they are more likely to work hard and engage in the activity if it is meaningful to them. In rehabilitation, we acknowledge this by working with our clients to develop goals for therapy. It would be meaningless to set goals that are important for me, as a physical therapist, that aren't important for my patient. In fact, it is unlikely that the patient will work toward those goals, or consequently, that he will achieve them. There is also an issue here of paternalism, one that has a long history in medicine. We in medicine may be the experts in the room in so far as the medical condition is concerned, but we certainly are not experts when it comes to the person, the individual, sitting in front of us. The person in front of us is the expert. So, we need to ask him what his goals are, what he wants, what he values. We need to set goals based on his values if we want his buy in, and his full participation.

This leads us to the idea of values-based participation. As you develop your program, you are going to be well-served to think about your own values, those of your team, and those of your client. From there you will think about your client's patient population, the individuals who are the target participants for your program. What might their values be? How will you

know? And based on their values, what will you include, or exclude, from your program proposal? Should you offer therapy during the program day? Trips into the community? Competitive sports? Aquatics? Hippotherapy? Quiet time? Reading and writing help? Should you provide meals? Work with participants to prepare meals, set the table, host company? The list of activities and participation opportunities that could be included is endless; how will your team decide what is most important for your client's target population and what you will include?

4.6.1 Values Inventory (DB)

Complete the *Values Inventory (Schwartz Portrait Values)* found at: https://discovermyprofile.com/tests and then come into the discussion board and muse over your results. Do your values primarily come from your family, culture, religion, etc. or do they come from the school of hard knocks, life experience, paradigmatic restructuring? Did anything in your values inventory surprise you? Have you clearly thought out your values previously? Do you believe that values can, and do, change throughout our lives? Can you identify and articulate any of your own values that have evolved and what the catalyst for change was?

Research shows that individuals' values do change throughout their lives, as they get older, as they pass through different life stages (Gouveia et al., 2015). In addition, exposure to others who are different than us can open our eyes to different perspectives and cause us to rethink our own values. While we tend to see our values as something we need to protect, it may be more realistic to accept that our values are a construct – something that is a distinctive characteristic of an individual or group that leads to some goal, for example, social acceptance (Rohan, 2000). That means that

we need to be careful about how we manage situations in which our values differ from those of our clients, since values do not have an inherent hierarchical structure. In other words, your personal values may have a hierarchical structure for you, but values separate from the individual, society, or culture, do not have an inherent hierarchical structure; they are a construct.

As your team develops the portion of your program focused on assessing your clients' values and quality of life as perceived of based on those values, be mindful of avoiding implied bias in your questions. Bias is a topic worthy of an entire text on its own, but it is worth reading at least a little about it. Please read *Implicit bias in healthcare professionals: A systematic review* (FitzGerald & Hurst, 2017). Use the information in this article as a reminder to guard your program development process.

You will be developing this portion of the project to assess the program participant's values, so that you can gauge whether he or she would be a good fit for your program, in which activities he or she would be interested in engaging, and how your program can best meet his/her needs. In the development of your program, you will want to evaluate every included activity, so that you can ensure that time, money, and energy is well spent, and so that participants will return and progress, whether personally or physically. For example, if my client has asked that I develop a program for children with cerebral palsy, and I don't assess whether parents and caregivers value a setting in which children are either engaged with their typical peers or their atypical peers, those who have similar conditions, then I am missing an important piece of information about how my program should be designed. Or, if I've started a camp for children who are atypical, I would need to assess whether participants and their parents

valued that environment, as opposed to mainstreaming, where atypical and typical

children are brought together, to assess whether the camp environment was a good fit

for any one child and his family. As you create value questions, your goal is to assess

your potential participants' values in relation to your developing program and what it

will offer. Will your program be a good fit? Are you offering what your client's patient

population values? How will you find this out? And once you have, how will you

ensure inclusion of the important parts?

4.6.2   Quality of life assessments

Please visit the Positive Psychology page: https://positivepsychology.com/quality-of-life-

questionnaires-assessments/ and read all about Quality of Life (QoL). There are a lot of

things to unpack when we talk about quality of life, and I want to recommend that you

start unpacking them by thinking about how you would rate your own quality of life and

why. There are many factors that are included in an assessment of quality of life, and the

factors that predict one person's quality of life rating may not be the same as those that

predict another's. Additionally, there is no one definition for QoL, agreed upon by all

researchers. Regardless, we do know that one of the primary predictors is mental and

physical wellbeing, and all the things that go into that – pain, independence, freedom,

health, clear-mindedness. It is understandable then, that healthcare is concerned with QoL

as it relates to health. The ICF provides a framework for thinking about how health

effects QoL, particularly as related to secondary impairments, limitations in daily

activities, emotional problems, social isolation, and unsupportive environments

(McDougall et al., 2011). There is a connection between values and QoL, as well, and

that should be considered. As you work on your deliverable, consider if, and how, you

will include assessment for Quality of Life. Will you measure changes that occur due to engagement in your program? Visit *HealthyPeople.gov* (https://www.healthypeople.gov/2020/about/foundation-health-measures/Health-Related-Quality-of-Life-and-Well-Being) and explore how the Office of Disease Prevention and Health Promotion is assessing QoL and its connection to health.

4.6.3   End-of-life and decision-making capacity (DB)

Do you truly believe that you can make sound decisions? Or is it possible that your decisions are what they are because of the town you live in, the way you were raised, the options placed before you, the people that you wish to please, and a myriad of other influences?

Mpofu, in his text *Rehabilitation and Health Assessment*, states that, "The judgement by others as to whether an individual can make rational and informed choices that are health sustaining and consistent with his or her long-held values may seem relatively simple. In reality, this process is extremely difficulty yet one that embodies the ideals of the ICF" (Mpofu & Oakland, 2010). Sometimes, other people get to decide if you are able to make good decisions. Note the criteria: according to your long-held values. Based on stories you may have seen in the news, were you aware that this was a key tenet of deciding whether an individual had decision-making capacity - his or her "long-held values"? Please read the material found in the article *Evaluating Medical Decision-Making Capacity* (https://www.aafp.org/afp/2018/0701/p40.html). Note that in this article, the client's long-held values are not at the forefront of deciding capacity. This is a clear case of paternalism. Look up "paternalism". What do I mean when I use this term? Watch: *https://www.youtube.com/watch?v=J_EKwSXOsVE*

Thoughts? This DB is about engaging with this material, your values, your Quality-of-Life assessment, and how all of that relates to your end-of-life choices. If you don't have a chronic disability or illness, do you think having one would change anything? Why or why not? Are you revealing a bias?

4.7 Chapter Activities

4.7.1   Independent Learning Activities Links

4.7.1.1 Exploring assigned diagnoses/disabilities

As a member of the profession to which you have been assigned, and as a member of your team, start exploring the activities and participation limitations of the client population with which you will be working. As a team, ask key questions: What do you need to know? Where can you find information? How do each of the professions typically engage with these clients? You will return to your team with an individual deliverable, which will include all the information (artifacts) that you feel are important to add to your team's first deliverable.

4.7.1.2 ICF resources for activities and participation, from WHO and at:

https://www.rehadat-icf.de/en/klassifikation/

The Rehadat website will allow you to get a good overview of how different elements of the ICF are categorized. Explore! Follow the tabs through activities and participation and think about how each item applies to your client population. Build your outline for your first deliverable here. For example, if you are going to think about the example we began with in the last module - children who have difficulty with (under body functions) articulation functions due to cerebral palsy, you could follow that to appreciate that they may have limited communication:

speaking. Then, you could continue to think about how that would affect

participation, come to appreciate that there would be a participation limitation for

conversation and discussion. So, as you think about your program participants and

their need to communicate, you can consider what types of limitations they may

have in that arena, and how you will address those limitations in your assessment

and program.

4.7.1.1 Assess an Assessment

Psychometric Properties link (https://www.physio-

pedia.com/Psychometric_Properties)

4.7.1.2 Quality of Life Assessments

Positive Psychology page: https://positivepsychology.com/quality-of-life-

questionnaires-assessments/

4.7.1.3 ICF resources for activities and participation

https://www.who.int/classifications/drafticfpracticalmanual.pdf

4.7.2 Constraint-Induced Therapy (DB)

Introduction to CIMT video

(https://elearn.etsu.edu/d2l/le/content/8474697/viewContent/69679124/View)

4.7.3 Values Inventory (DB)

Schwartz Portrait Values at the Cambridge University Test Site:

https://discovermyprofile.com/tests

4.7.4 End-of-Life and Decision-Making Capacity (DB)

Evaluating Medical Decision-Making Capacity

(https://www.aafp.org/afp/2018/0701/p40.html)

4.7.4 iRAT/tRAT

4.7.5 Application Activity: Activities & Participation Deliverable 2

4.7.6 Independent Assignment: Complete your third Self-Reflection

Use this opportunity to reflect on your engagement with your team prior to completing and receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews. Prompt: Considering the work that you and your team have engaged in over the course of the last module, think about and respond to the following questions:

1. What skills did you use to manage your exploration of the topic? How did you ensure that you did enough so that you were able to contribute to your team's efforts?

2. How could you have done what you did for this module differently? Better? Did your peers do anything in a way that you might adopt in the future?

3. What is working for you in terms of the team's interaction? What isn't? Are there things that need to be talked about in the team meetings?

4. Are you an asset to your team? Are there ways in which you can bring more to the team? Are you starting to notice others' strengths as well?

4.7.7 Complete your second PEER REVIEWS

Module Five: Environmental & Personal Factors

5.1 What are Environmental Factors?

As we dive into this next section, I want to remind you that the underlying principles of the ICF are that it can be applied universally, that it is neutral, based in parity (all conditions are on an equal footing), and based on environmental factors. So here we are, on environmental factors. Up until now, we have discussed body structure and function (wholly related to the individual's physical state or condition), and activity and function (wholly related to what the individual can do or does, or ways in which he or she is limited). Now, we are going to think about these things in the context of the individual's environment and his/her personal factors. This is where the ICF takes a clearly different tack than the medical model. In the medical model, a person is evaluated according to his or her pathology, impairments, and functional limitations, but none of these is evaluated in context of the environment in which he or she lives every day. While it can be argued that those functional limitations that inhibit one's engagement in his/her roles rise to the level of disability in the medical model, because, in part, of the environment in which one seeks to engage, this is never explicitly understood as an element of the decision-making that the medical model promotes. Take for instance, a client who has experienced a stroke and can no longer effectively use his left upper extremity. Let's say that he has impairments related to range of motion and strength, and go on to say that he cannot grip, carry, lift, or push and pull. This may mean that he cannot engage in ADL activity or work using that arm. Does that rise to the level of disability for him? Quite probably, particularly if his work is to, let's say, write in long hand or type. You can see that deciding that there is a disability for this client included considering his work,

but that is, in effect, all that was required for the. medical model. The ICF asks that we consider much more.

Within the ICF model, we are asked to recognize and consider the importance of the environment in which one lives and functions – how the terrain or building design wherein he works, the law and policy of his community, and his interaction with his surroundings (physical and social), affect his ability to successfully perform activities and participate with others. And note that environmental factors can either be facilitators (e.g., the individual has a mobility device and assistive technology) or barriers (e.g., he can't ascend steps independently but has two flights of stairs outside the home, with no handrail). This is the only domain in the ICF that allows for categorization of elements as *facilitators* or *barriers*. While everything we've discussed previously has been health-related, this domain is not. This domain addresses the multidimensionality and dynamic nature of disability. Environmental factors, per the WHO, "must be taken into consideration as they affect everything and may need to be changed ("International classification of functioning, disabiltiy and health: ICF," 2001)." The WHO goes on to define environmental factors as: "The physical, social and attitudinal environment in which people live and conduct their lives (2001)." When environmental factors are facilitators, we say that an environment is accessible. If an environment is accessible, then an individual's limitations may not rise to the level of disability. If he or she can function within the environment – the physical and social structure is supportive – than a disability may not exist. The individual hasn't changed, the context in which he lives, and functions has, and therefore, disability has been alleviated and accessibility provided. If we were using a medical model, this would not be possible. With the ICF, it is.

Under the heading of environmental factors are products and technology, natural environment and human-made changes to the environment, support and relationships, attitudes, services, systems and policies. Each of these, for any given client, may be a facilitator or a barrier. And, within that understanding, each can either be a mild to complete barrier or a mild to complete facilitator. Stop and think about your own environment. What within it is a barrier or a facilitator? Just sitting here typing, I can list as barriers the lack of natural light in my home and at my workstation, the lack of support for the research and cross-checking my writing demands, my negative attitude about sitting and typing for long periods of time, and the policies that require that I complete this manuscript in under three months. Each of those is a barrier to my success, each to a different level. But I have facilitators, too. I have two desktop computer monitors, a wonderful little desktop lamp, a love of writing and teaching, and the freedom in my scheduling to allow for blocked off writing time. Again, each is a facilitator to a different extent. Ultimately, my ability to think and write is reflective of not only my physical abilities, but also of the context of my environment. I can perform despite, and because of, environmental elements. If poor lighting is prohibitive and stopping me from writing, then I can try to find a solution for that; that environmental element needs to be addressed. Once addressed, it is no longer a limitation. Remember that capacity refers to the ability of the individual to do something in a standardized environment, such as a clinic setting. Performance requires that same activity to be performed in his/her actual or usual environment. The gap between capacity and function/performance is due to many factors, some discussed previously. But ultimately that gap reflects the difference between the standardized and usual environments and can aid in assessing what within the usual environment can be changed to improve performance.

For this next section of your project, you will have to explore all the potential facilitators and barriers for your clients within their environments. Think about the way in which everything from good family support, appropriate assistive devices, and policies within a community that provide for free transportation can facilitate success. Think about how a lack of these things could inhibit success. Once you've brainstormed the possible environmental factors involved, you and your team will create assessment questions that collect information about them and suggest possible interventions at this level. You will then consider the inhibitors that you will plan to remove from your program environment, and the facilitators that you will build into it. For example, will you provide text-to-speech technology? Aides for eating and dressing? Transportation?

5.1.1 *The Environmental Press Model (DB)*

The environment in which one lives and works, and all its elements, can help or hinder one's recovery and function after an injury or when a pathology is present. Additionally, an individual's competence in meeting the demands of the environment, and the ways in which that competence interacts with environmental demands, is predictive of how well one will succeed within the environment. This is called the environmental press - competence model. It is officially defined as follows:

environmental press–competence model - a model of stress and adaptation in which adaptive functioning in the environment depends on the interaction between stimuli in a person's physical and social environment that place demands on that individual (environmental press) and the individual's competence in meeting these demands, which is shaped by such personal characteristics as physical health and cognitive and perceptual abilities (Lichtenberg et al., 2000).

In other words, one's competence should be a good match for environmental demands in order for one to succeed. The demands cannot be too high or too low. Send me to basketball camp and I'll fail; I'll be incompetent. Send me to basic writing and grammar camp and I'll be bored and probably leave early. Environmental press can be thought of as a cognitive press or a physical press, or both. When we speak about disability, particularly newly acquired disability due to disease or injury, the individual must adapt to the disability to move forward and continue to live a quality life. It is beyond the scope of this text to discuss adaptation to disability, but I would refer the reader to the literature related to psychosocial and psychological adaptation to disability. Acquiring a disability, especially one that changes the ability to be independent, or to engage in activities, hobbies, or work that fulfills you, is life-altering, and demands a great deal of competence to mount a response. An individual's self-efficacy, attitude, and perseverance (or grit) are all tested.

Environments, and their challenges, run the gamut from those that are purely physically or purely mentally challenging, to those that are both; from those that are only mildly challenging to those that defeat us; and from those that present with only one or two barriers or facilitators to those that are complex and multi-faceted. As a college student, one environmental challenge that you probably faced within the last few years was the move from the high school and home environment to the higher education environment. While there are memes out there that capture the humor of college life, in reality the challenge is very stressful and presents young people with an environment in which barriers include loneliness, unfamiliarity, academic stressors, living situation stressors and financial challenges, in addition to others. Facilitators may include support of family and friends, mentors within the college, college administration offices (debatable, I know) and helpful professors. But ultimately, the individual who comes to college and faces its

challenges must have a baseline of competence to succeed. He or she must be able to plan, schedule, manage time and resources, seek out help when needed, and recognize his or her own weaknesses. Some competence must exist, or the new college student will not meet the press of the environment and will fail, despite the facilitators available.

For part one of the Environmental Press <mark>Discussion Board</mark>, think about a time when you found yourself in a mismatched environment. How did you feel? How did you cope? How did it turn out?

For part two, note that the ICF identifies both facilitators and barriers in the environment. What were some facilitators, if any, and what were some barriers, if any, in the example you gave for part one? To what level did these elements hinder or help you to succeed?

2. *The Physical Environment*

(Exemplar Assessment: ADA Checklist found @ https://www.adachecklist.org/checklist.html)

5.2.1 Home assessment

It is important to assess the home and work environments as a means of identifying facilitators and barriers of each. A home assessment is often done prior to discharging a patient from a healthcare facility, in order to ensure that the patient will be safe, will be able to access his/her environment, and will have the supports that he/she need sin the environment in order to be successful. For a thorough home assessment, the assessor needs to understand the client's abilities, support system, and daily requirements in terms of activities of daily living. Please explore the Home Safety and Accessibility Assessments found at: https://www.aota.org/practice/productive-aging/home-mods/rebuilding-together/assessments.aspx

5.2.2 Public building assessment *(Team DB)*

You will be working with your team to perform a public building assessment. You can choose any public building that is more than 15 years old, on campus or off, but I recommend a restaurant or retail establishment. You will use the ADA Checklist for Existing Facilities (https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf) to complete your assessment. The instructions for how to perform the survey of the property are included in the document. Please read the whole document and prepare yourselves before going out to do the assessment. Imagine that you are performing the assessment with members of your assigned patient population in mind. Submit your completed Checklist to the Dropbox for this assignment.

Answer the following questions:

1. Would you, if you had the diagnosis that you imagined, go to this place of business? Why or why not?

2. Did anything about the assessment surprise you?

3. Do you think that the building you assessed in unique in any way for your community?

4. Do you have any thoughts about how accessibility might hinder community access for people with disabilities based on your assessment?

5. What would be your top three recommendations for change for your building's owner?

5.3 What are Potential Personal Factors?

From the perspective of the ICF, personal factors include those factors specific to an individual's life and living situation that are not a part of the primary health condition. Personal factors may include gender, age, race or ethnicity, educational level fitness or activity level, lifestyle, habits,

coping style, and social background. Personal factors are the things that make a person an individual and that define him or her. Similar to the factors we discussed in the previous section, personal factors may be facilitators or barriers. Personal factors are not specifically coded in the ICF; they are widely variable across cultures and have not yet been clearly defined. They are included in the ICF, however, because they have an influence on an individual's function. By way of example, Fernandes, et. al. found that educational level, in combination with anatomical location of a stroke, was predictive of functional recovery and independence (2014). Bettger, et.al. was able to identify a correlation between socioeconomic status and disability post stroke (2014). And Lo Buono et. al. demonstrated a connection between accommodative or active coping strategies and quality of life for clients post stroke (2017). Each of these, educational level, socioeconomic status, and coping strategies, are personal factors. A CVA or stroke can be debilitating, and most clients do not achieve full recovery and return to prior level of function. It appears that, for this diagnosis in particular, personal factors that were in place prior to the incident are very important.

Some personal factors are changeable or modifiable, and some are not. For example, one can change lifestyle, habits, and educational level, albeit not easily. Modifiable factors are the entry level at which healthcare providers often seek to change the outcome for their clients. Other personal factors are not modifiable, as one cannot change race or age or family history. Nonmodifiable factors may be mitigated – made less severe – but they cannot be removed. Both modifiable and nonmodifiable risk factors are important considerations when assessing a client or client's ability to cope with a disability. The collection of demographic data will provide some information, but some data needs to be collected in other ways, and often through specifically crafted questions or discussions.

5.4 Personal Characteristics

5.4.1   Pain, Positivity, Personality, and Education?

It may seem odd, but our perception of pain is one area in which personal factors play an important role. Pain is perceived, which means that your brain, which can only interpret what the sensory system delivers to it, decides what you are feeling and then tells you what and where that feeling is. Your perception of pain is uniquely yours, and perception is multidimensional and complex. Pain perception is influenced by genetics, development, culture, and psychology. Your emotional state and situational factors may change the pain you are feeling. Please read the following article *Psychological aspects of pain perception* found at: https://pubmed.ncbi.nlm.nih.gov/7702468/. Can you relate to anything discussed in this article? While pain is real (meaning that noxious or damaging stimuli do send an electrical and chemical signal along the nervous system along the peripheral nerves to the spinal cord and then, often, to the brain), an individual's perception of pain is fabricated, created, formulated by the brain. It is entirely subjective. Since it is, it can be influenced by multiple factors. I've selected pain as the focus of our discussion because pain is something that we can all relate to, that we've all experienced. It's also something that we've all seen others experience. How many times have you seen another person experience an injury that you considered minor and, when they reacted with a great deal of drama, you thought they were hamming it up or overreacting? What about your own pain? Has there been a time when something hurt you physically to a greater degree than people around you deemed realistic? Or perhaps less so? Do you consider yourself a person with a high pain tolerance or perhaps even a low tolerance for pain or its close cousin – cold? Using just this example, can you appreciate how any one

factor can influence health, even if we define health in the simplest terms, that is, how you feel?

Positivity is another personal factor that has been shown indisputably to influence health. Positive thinking, which is inclusive of resiliency (the ability to adapt to stressful or difficult situations or loss), smiling and attitude monitoring, and reframing (seeing things from a standpoint of gratitude and appreciation) are all predictive of current and future health. Additionally, research has shown that people know what type of person that they are, which may indicate that people have a setpoint from which they can only move fractionally. While it's unclear what the exact mechanism for the connection between positivity and health is, there is a strong link between them. A positive attitude improves health behaviors, improves health outcomes, and allows for satisfaction and a better quality of life for those living with disability.

Finally, in the realm of health, there is the ever-nebulous outcomes connection to educational level. What might the connection be between an individual's highest level of education and his or her outcomes following a stroke or other disabling event? Notably, this connection parallels the connections between socioeconomic levels and outcomes, and occupation and income and outcomes as well. The reasons for these connections remain unclear, although a difference in utilization of healthcare has been proposed. Regardless, it should be evident that personal factors matter. For the next part of this module, we will explore three important personal factors: grit, locus of control, and self-efficacy. These three personal factors are relevant for everything that you, and your clients do and how you approach challenges and opportunities. Disability can be either, depending on point of view, support system, and the way in which that disability is dealt

with. For most of this course, we are learning about the factors that influence health solely in order to apply them to the current case and in hopes of applying them to our patients/clients in the future. But grit, locus of control, and self-efficacy are topics worth considering for yourself first, before you try to think about how they affect others. We'll spend a little time doing that, and then you and your team will apply the concepts you've learned to the next deliverable.

5.4.2 Grit

To appreciate the concept of Grit, please watch the linked video, presented by Dr. Duckworth: https://www.youtube.com/watch?v=qaeFnxSfSC4

5.4.3 Locus of Control

Please watch the Locus of Control video, linked through Khan Academy.

https://www.khanacademy.org/test-prep/mcat/individuals-and-society/attributing-behavior-to-persons-or-situations/v/self-esteem-self-efficacy-and-locus-of-control

5.4.4 Self-efficacy

Self-efficacy was discussed in the Khan Academy video but is also discussed in the link from Very Well Mind. Please read about self-efficacy at that site.

https://www.verywellmind.com/what-is-self-efficacy-2795954

5.4.4.1 Independent Assignment: Complete the ==Grit & Locus of Control Assessments (DB)==

Please complete the Grit Scale, found at: https://angeladuckworth.com/grit-scale/

Then go to https://my-personality-test.com, navigate to the Locus of Control test, and take that. In the Discussion Board, reflect on your results. Do you feel that these two "tests" accurately reflect your personality and temperament? Do you

think that you are different in different settings? That you've changed as you've grown older or found yourself in different circumstances? What have you learned through the presentations on grit, locus of control, and self-efficacy – for yourself and your future patients.

5.5 Chapter Activities

5.5.1 Independent Learning Activities Links

5.5.1.1 Home Assessments

o ADA Checklist found @ https://www.adachecklist.org/checklist.html

o Home Safety and Accessibility Assessments found at:

https://www.aota.org/practice/productive-aging/home-mods/rebuilding-together/assessments.aspx

5.5.1.2 Public Building Assessments DB

o ADA Checklist for Existing Facilities

(https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf

5.5.1.3 Personal Characteristics Links

o *Psychological aspects of pain perception* found at:

https://pubmed.ncbi.nlm.nih.gov/7702468/

o Grit, presented by Dr. Duckworth:

https://www.youtube.com/watch?v=qaeFnxSfSC4

o Locus of Control video, linked through Khan Academy.

https://www.khanacademy.org/test-prep/mcat/individuals-and-society/attributing-behavior-to-persons-or-situations/v/self-esteem-self-efficacy-and-locus-of-control

- Very Well Mind, found at: https://www.verywellmind.com/what-is-self-efficacy-2795954

5.5.1.4 ICF resources for environmental & personal factors

https://www.who.int/classifications/drafticfpracticalmanual.pdf

5.5.2 Environmental Press DB

For part one of the Environmental Press Discussion Board, think about a time when you found yourself in a mismatched environment. How did you feel? How did you cope? How did it turn out?

For part two, note that the ICF identifies both facilitators and barriers in the environment. What were some facilitators, if any, and what were some barriers, if any, in the example you gave for part one? To what level did these elements hinder or help you to succeed?

5.5.3 Grit & Locus of Control Assessments (DB)

Please complete the Grit Scale, found at: https://angeladuckworth.com/grit-scale/

Then go to https://my-personality-test.com, navigate to the Locus of Control test, and take that. In the Discussion Board, reflect on your results. Do you feel that these two "tests" accurately reflect your personality and temperament? Do you think that you are different in different settings? That you've changed as you've grown older or found yourself in different circumstances? What have you learned through the presentations on grit, locus of control, and self-efficacy – for yourself and your future patients.

5.5.4 iRAT/tRAT

5.5.5 Application Activity: Environmental & Personal Factors Deliverable 3

5.5.6 Independent Assignment: Complete your fourth Self-Reflection

Use this opportunity to reflect on your engagement with your team prior to receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: People frequently report a high level of grit and an internal locus of control because we all want to see ourselves in the most positive light. And yet, if you are now most of the way into a long semester, you may be struggling to stay focused, to keep up with work, or to do all of the things that your courses require of you. Do you think that you are exhibiting grit?

1. During this module, did you spread out your workload to make it manageable? Or did you find yourself cramming and doing things in a rush?

2. Do you find yourself able to re-engage when you become tired or distracted? What are the ways that you do that?

3. Has your team started to develop good communication strategies? Good teamwork skills?

5.5.7 *Complete your third PEER REVIEWS*

Module Six: Program Proposal

6.1 <mark>Application Activity</mark>: Program Proposal Deliverable

For this final deliverable, team work together to complete their assessments and/or program proposals. Using all of the feedback that they have received thus far, they create one complete project, with all of the inclusions necessary to present a complete picture of what they are going to present to the client. In general, they must ensure that their assessment is complete and includes all necessary elements as outlined in the ICF (I do not have them divide their assessments according to the modules or the ICF, but as they wish to divide them), and that their program is complete and answers not only the original client proposal, but also all of the items that they determined were relevant as they worked through the term and the different aspects of the ICF framework for their potential program participants. I permit students the freedom to present in any manner they choose, to include via video, slide presentation, brochure/written product, etc. My rubric for grading is included with my syllabus, in Appendix A. I have the clients complete an informal feedback form as well.

6.1.2 Independent Assignment: Complete the <mark>Modified Wurdinger Questionnaire</mark>

When everything else is done, at the end of the course.

6.1.3 Independent Assignment: Complete your fifth <mark>Self-Reflection</mark>

Use this opportunity to reflect on the course as a whole, your learning and participation, and how your feelings about the content changed, if they did. Reflect on your Wurdinger changes, if any.

APPENDICES

A. *Sample Course Information*

Credit Hours

3 credit hours.

Course Description and Purpose

Utilizes the International Classification of Functioning, Disability, and Health (ICF) guidelines to present a comprehensive survey of assessment tools, emerging technologies, and procedures for assessing rehabilitation and health care interventions and how this information can inform clinical decision-making.

Course Goals

- Introduce students to comprehensive assessment tools and the technologies needed by rehabilitation professionals.
- Emphasize the World Health Organization International Classification of Functioning, Disability, and Health (WHO; ICF) guidelines in making clinical practice decisions.
- Provide opportunities to develop the skills needed to build and maintain interprofessional teams.

Course Objectives

1. Recognize the value and importance of using the ICF classification framework and outcome assessments based on the ICF to evaluate Body Function, Body Structure, Activity, Personal, and Environmental Factors that influence Participation.

    a. A successful learner will be able to *list* the different components of the ICF and *summarize* the key elements for consideration in each.

    b. A successful learner will be able to *recall* the history, developmental purposes, and intended applications of the ICF.

    c. Given a client/client diagnosis and a specific situation/setting, the successful learner will be able to *predict* related factors, such as possible body structure and function sequelae, activity and personal limitations, and environmental factors that might affect outcomes.

    d. Working with an "interprofessional team", the successful learner will be able to *synthesize* the components of the ICF *as related* to a given population and *create* an assessment tool for classification and clinical decision-making.

2. Critically evaluate measurement properties of existing outcome measures for application in clinical practice, including validity, reliability, responsiveness, and clinical utility.

    a. Given an existing rehabilitation assessment tool, the successful learner will be able to *identify and discuss* elements related to the tool's validity, reliability, and other factors.

    b. Given an existing rehabilitation assessment tool, the successful learner will be able to *extrapolate* its relationship to, and foundation within, the ICF framework

    c. Given a client/client case, the successful learner will begin to *develop problem-solving and clinical reasoning skills*, as demonstrated by proposed solutions to client/client limitations and goals, as presented in a rehabilitation assessment.

3. Identify the appropriate opportunities for cooperation and collaboration in application of the model to client/client interaction and planning.

    a. Working with an "interprofessional team", the successful learner will *formulate* an appropriate structure for role assignment and interaction in the creation of the final Assessment Tool project.

    b. As demonstrated by scores on peer feedback forms, the successful learner will *demonstrate* the ability to engage in reflection, giving and receiving constructive feedback, and personal growth as a team member.

    c. The successful learner will *cooperate* with team members to integrate each team member's constituent elements into the *creation* of a rehabilitation assessment.

4. Recognize and appreciate the influence of biases, prejudices, and values on client/client and interprofessional collaboration and decision-making, and the different perspectives of the individuals involved in setting goals and making client-related decisions.

    a. Given self-assessment tools that provide insight into biases, prejudices, and values, the successful learner will *demonstrate self-reflection and appreciation* for their own, and others', different perspectives and worldviews.

    b. Successful learners will *appreciate* the ways in which disability affects all aspects of an individual's life.

    c. Develop *awareness* of the importance of healthcare providers' responsibility for using knowledge and influence to improve individual client's/client's Quality of Life and to advocate for societal change.

5. Effectively utilize resources to assist with outcome measure selection, including the use of online databases to find assessment tools and interpret their measurement properties.

    a. The successful learner will be able to *identify and access* sources of information to inform each element of the ICF and client/client assessment.

    b. Given a client/client case the successful learner will *utilize available resources* to identify and select appropriate assessments.

Major Topics

- Measurement in rehabilitation services

- Assessment in rehabilitation services

- World Health Organization International Classification of Functioning, Disability, and Health (WHO; ICF) framework

- Interprofessional (IP) collaborations and teams

- Clinical practice decisions

- Clinical assessment tools

- Clinical assessment technologies

- Client-centered approach

Textbooks and Readings

An OER textbook will be required for this course. All links are available through the text.

Technical Requirements

Each team will benefit from having access to the internet via at least one computer/team. Students may also benefit from access to Dropbox, OneDrive, Google Drive, or some other file hosting service that allows team members to share resources and documents and work collaboratively on project components. This may also be accomplished via the LMS.

Assignments and Submission Guidelines

The assignments in this course vary greatly, from individual to team (not group, ugh!), from brief to very involved. There are low-stakes quizzes and in-depth thinking projects. There's even a movie to watch at the beginning and a fun, going out, social thing towards the end. We'll talk about all of them in class. You will submit all assignments via the drop box in D2L, or to my email.

Late and Missing Submission Policy

This course is teamwork intensive, in the same manner that participation in a healthcare team in a clinical setting would be. Therefore, for team-related project elements, each student's participation is paramount to the success of the entire team. Should any member of a team fail to complete and submit his/her individual project deliverable by the date required, the entire team will be handicapped and have difficulty moving forward with the project. Therefore, *failure to submit the individual elements required for team project deliverables will result in a "0" being given for the individual component of the teamwork, for the first failure to submit, for the student who failed to submit work. The student will receive a "0" for both his/her individual and team grade for the deliverables for any subsequent failure to submit work.* In addition, students should appreciate that failure to engage fully in the team project is also likely to be reflected in peer assessment grades.

Other course assignments, to include reflective papers, Self-Reflections, Peer Review forms, etc., will either be marked as "missing" (if a completion grade-based activity) or receive a 10% penalty for every day late. Team Project Deliverables will also receive a 10% deduction for every day late, for every member of the team.

Grading Policy

There are a total of 1000 points available in this course.

1. Individual Assignments will determine student participation points. Individual Assignments are to be submitted at the beginning of the class period in which they are due and will not be accepted after the scheduled class start time (without prior arrangements). There five individual assignments, and **50 Participation Points are available.** Regardless of the number of assignments completed and turned in, more than four unexcused absences will result in a 50% reduction in earned participation points. Individual assignments include:
   a. Metacognitive Awareness Inventory [10 pts.]
   b. Modified Wurdinger Questionnaire (pre-course) [10 pts.]
   c. Attestation of completion of ICF e-learning [10 pts.]
   d. Assess an Assessment [10 pts.]
   e. Modified Wurdinger Questionnaire (end-of-course) [10 pts.]

2. Team "quizzes" (iRATs/tRATs) that gauge preparation for class are **worth 100 points.** There are four iRATs/tRATs in the course.

3. Additional assignments that will assist in developing your understanding of course material are **worth 100 points.** These assignments include Discussion Boards and one Team Application Activity:
    a. DB: Medical vs. Biopsychosocial Model [15 points]
    b. Team Application Activity: ICF Categorization Activity [10 points]
    c. DB: Constraint-Induced Therapy [15 points]
    d. DB: Values Inventory [15 points]
    e. DB: End-of-Life Capacity [15 points]
    f. DB: Environmental Press [15 points]
    g. DB: Grit & Locus of Control [15 points]
4. Individual Project Deliverables are **worth 150 points.** All project deliverables are to be turned in by the due date, and also printed and kept in a Project Development Portfolio, which will be submitted along with each team's Final Project submission. There are three Individual Project Deliverables.
5. Team Project Deliverables are **worth 150 points.** Each member of the team will receive the same points for Team Deliverables. Individual and Team Project Deliverables 1 through 3 will not receive a numerical grade; instead, they will be rated as Below Average, Average, or Above Average. Points will be added to the final grade based on quantification of ratings earned over the course of the class. Please review the Late and Missing Submission Policy related to this element.
6. The Final Deliverable (Deliverable 4) – the creation of a program and assessment overview, based on the ICF – is **worth 300 points.** This is a team grade. Each member of the team will receive the same points for the Final Deliverable/Project, unless a zero was received for any Individual Deliverable (see *Late and Missing Submission Policy*, above). A zero on any team grade for deliverables will result in a 25% penalty on the final grade for this element.
7. You will have the opportunity to engage in a Peer Review process for each deliverable. This process will allow you to engage in constructive feedback – both giving and receiving it. The final, summative iteration of feedback will be confidential, the formative iterations will be shared anonymously. Peer Reviews are **worth 100 points**.

8. Finally, you will engage in a ==self-reflection== process throughout this course. You will complete these self-reflections in a DB that is set up just for you, that no one can read except for you and me. You are required, at a minimum, to complete a self-reflection each time one is asked for in the schedule (five times) but may engage at any time. The goal is for you to engage in self-reflection regarding your learning curve, your team interaction, and your process of thinking as you go through the course. Your self-reflections are **worth 50 points**.

==Colors are coded to the text and to the course schedule.==

Grading Policy

A	95-100%	950-1000 pts.
A-	92-94%	920-949 pts.
B+	89-91%	890-919 pts.
B	86-88%	860-889 pts.
B-	83-85%	830-859 pts.
C+	80-82%	800-829 pts.
C	77-79%	770-799 pts.
C-	74-76%	740-769 pts.
D+	71-73%	710-739 pts.
D	68-70%	680-709 pts.
F	below 68%	679 pts. or fewer

East Tennessee State University

Course Home   Content   Communication ⌄   Evaluation ⌄   Course Tools ⌄   A to Z ⌄   Zoom   Edit Course

Edit Rubric ⌄

Status: Published ⌄

Name*

Discussion Board Rubric 40 points

Type: Analytic ⌄   Scoring: Points ⌄   ⇄ Reverse Level Order

...	Level 4	Level 3	Level 2	Level 1	
	8 pt 🗑	4 pt 🗑	2 pt 🗑	0 pt 🗑	
Criterion 1 Critical Thinking	Clear and logical statements; shows insight; engages in analysis of topic/issue	Substantial information; thought, insight, and analysis has taken place regarding topic/issue	Generally competent; information is limited and commonplace; rudimentary	Rudimentary and superficial; no analysis or insight is displayed; confusing; lacks explanation or reasoning	/ 8
	Initial Feedback				
Criterion 2 Evidence/Argument Construction	Uses reliable evidence when constructing arguments; cites reliable sources, sources are credible	Uses reliable evidence, but may be out of context or unrelated	Uses some evidence although it may be insufficient to support the argument	Uses no evidence or unreliable, biased, or misleading evidence	/ 8
	Initial Feedback				
Criterion 3 Uniqueness	New ideas or examples; connections made with depth, detail or specificity	New ideas or connections; lacks depth and/or detail	Few, if any new ideas or connections; a rehash or summarization of others' posts	No new ideas; simply restates "I agree..." or "Great idea..." without providing a valid explanation that offers new ideas	/ 8
	Initial Feedback				
Criterion 4 Timeliness	Completes all required postings within the weekly time frame; participates early in discussion and throughout the discussion; responds to peers/faculty follow-up questions	Completes required postings; some not in time for others to read and respond to	Completes required postings; most at the last minute without allowing time for responses	Some or all required postings are missing; fails to respond to follow-up questions or comments	/ 8
	Initial Feedback				
Criterion 5 Stylistics/Mechanics	Few or no grammatical, spelling or stylistic errors	Some grammatical, spelling or stylistic errors	Obvious grammatical, spelling or stylistic errors; errors interfere with content	Obvious grammatical, spelling or stylistic errors; makes understanding difficult	/ 8
	Initial Feedback				

+ Add Criterion

Add Criteria Group

Total —/ 40

Overall Score

Each submission is assigned a level of achievement based on its overall rubric score.

Level 4	Level 3	Level 2	Level 1	
11 or more 🗑	8 or more 🗑	5 or more 🗑	0 or more 🗑	

Options ▷

Close

Course Home   Content   Communication ⌄   Evaluation ⌄   Course Tools ⌄   A to Z ⌄   Zoom   Edit Course

Edit Rubric ⌄

Status: Published ⌄

🔒 This rubric cannot be edited because it has already been used to assess learner work

Discussion Board Rubric - 15 points

Criteria	Level 4 4 points	Level 3 2 points	Level 2 1 point	Level 1 0 points	Criterion Score
Criterion 1 Critical Thinking	Clear and logical statements; shows insight, engages in analysis of topic/issue	Substantial information; thought, insight, and analysis has taken place regarding topic/issue	Generally competent; information is limited and commonplace; rudimentary	Rudimentary and superficial; no analysis or insight is displayed; confusing; lacks explanation or reasoning	/ 4
Criterion 2 Uniqueness	New ideas or examples; connections made with depth, detail or specificity	New ideas or connections; lacks depth and/or detail	Few, if any new ideas or connections; a rehash or summarization of others' posts	No new ideas; simply restates "I agree..." or "Great idea..." without providing a valid explanation that offers new ideas	/ 4
Criterion 3 Evidence/Argument Construction	Uses reliable evidence when constructing arguments; cites reliable sources, sources are credible	Uses reliable evidence, but may be out of context or unrelated	Uses some evidence although it may be insufficient to support the argument	Uses no evidence or unreliable, biased, or misleading evidence	/ 4

Criteria	New Level 3 points	Level 2 2 points	Level 1 0 points	Criterion Score
New Criterion Timeliness	All submissions completed in a timely manner - allowing for response and reflection time. Submissions demonstrate thoughtful dialogue.	Initial submission timely, follow up submission submitted hastily or at the last minute.	Submissions not completed in a timely manner - completed all at once or at the last minute.	/ 3

Total	/ 15

Overall Score

Level 4 14 points minimum	Level 3 11 points minimum	Level 2 8 points minimum	Level 1 5 points minimum

Options ▼

Rubric Visibility

◉ Rubric is visible to students

○ Rubric is hidden from students

  ☐ Include rubric feedback in overall feedback

○ Rubric is hidden from students until feedback is published

Score Visibility

☐ Hide scores from students

Advanced Availability

Allow new associations in

☑ Competencies

☑ ePortfolio

What are associations?

Close

Course Home   Content   Communication ⌄   Evaluation ⌄   Course Tools ⌄   A to Z ⌄   Zoom   Edit Course

Edit Rubric ⌄

Status: Published ⌄

Name*

Final Project Rubric

Type: Analytic ⌄   Scoring: Points ⌄   ⇄ Reverse Level Order

···	New Level 1	Level 2	Level 3	Level 4	Level 5	⟩
	1 pt 🗑	2 pt 🗑	3 pt 🗑	4 pt 🗑	5 pt 🗑	
Criterion 1 Understands the Problem and Requirements ···	Students' work shows incomplete understanding of problem and/or requirements related to the assigned patient/client population and delivery situation	Students' work shows slight understanding of problem and requirements – few issues are clearly addressed and needs met	Students' work shows understanding of problem and most requirements – most issues are clearly addressed and needs met	Students' work shows complete understanding of problem and all requirements – majority of issues are addressed	Student recognizes potential conflicts b/t requirements and seeks clarification from client/user – all issues addressed	/ 5
	Initial Feedback					
Criterion 2 Uses Appropriate Information ···	Students do not fully investigate patient/client or situational issues or fail to use information available	A good range of information found but not utilized appropriately	Use of information perceived; but some is not most appropriate for task	Good use of information; all sources and data is appropriate for task	Uses advanced information seeking and inclusion that improves assessment development	/ 5
	Initial Feedback					
Criterion 3 Creative Assessment Design ···	Students adopt created assessment and basically copy or plagiarize an existing tool	Student chooses/designs assessment that is inappropriate for situation	Student chooses/ designs assessment that is/are correct but somewhat inefficient	Student chooses/ designs efficient assessment	Student researches tradeoffs b/t different assessment designs & implements the results of this research	/ 5
	Initial Feedback					
Criterion 4 Design Appropriate Assessment ···	Students design an assessment that is without clarity, efficiency, or comprehensive perspective	Students' assessment has limited clarity, efficiency, or perspective of needed case information	Students' assessment has some user friendly design, but is inefficient to use or lacks a complete perspective of needed case information	Assessment is user friendly – clear and efficient, and with readily available outcome information	Well designed assessment that is clear and easy to use, efficient, and that results in useful outcomes	/ 5
	Initial Feedback					
Criterion 5 Design Inclusiveness ···	No evidence of cooperation of all team members	Evidence of limited team member cohesiveness	Evidence of team member cohesiveness with one exception	Evidence of team member cohesiveness and inclusion	Robust inclusion of all team members/professions	/ 5
	Initial Feedback					
Criterion 6 Assessment Presentation ···	Assessment is poorly presented, with spelling and/or grammar errors	Assessment has some spelling/grammar errors; lacking professional language	Assessment is without spelling and/or grammar errors but has clunky sentences or instructions; some professional language present	No grammatical issues with assessment; professional language present; some lack of clarity	Thorough clear instructions for assessment use, no grammatical errors, and professional language throughout	/ 5
	Initial Feedback					
Criterion 7 Literature and References ···	No references or references cited are somewhat inappropriate for subject	References cited are appropriate but somewhat limited; or citations are incomplete	Sufficient number of references for depth/ complexity of assessment; citations are adequate	Near complete list of references for subject of report; citations are near complete	Thorough list of references with complete citations and annotations	/ 5
	Initial Feedback					

+ Add Criterion

Add Criteria Group   Total — / 35

Overall Score

Each submission is assigned a level of achievement based on its overall rubric score.

New Level	Level 1	Level 2	Level 3	Level 4	⟩
0 or more 🗑	5 or more 🗑	8 or more 🗑	11 or more 🗑	14 or more 🗑	1

Options   ▷

Close

B. Model Client Proposals

There are two ways in which this course can be presented. The instructor may decide, based on the student population, to focus on understanding and applying the ICF to a set client/client group in the development of a program that would meet the needs of the population while also aligning with a Client's Proposal. This plan works best if students do not have a clear understanding of the ICF Framework since in this design, students are first engaged in a thorough understanding of their client population and the application of the ICF to that group.

The second way that this course can be presented is best for students who have a clear understanding of the ICF Framework and/or a good clinical appreciation for their assigned client groups. While this text is written to lead an instructor through the first type of delivery of this course, I am including here some Client Proposals that might be used for this second type of course delivery.

The first three Client Proposals (1 through 3) are designed to make students think first about clinical presentation within the context of the ICF, and then about appropriate program design and measurement and assessment tools that the client could use to rule in (or out) participants for their proposed program. This design encourages students to start thinking about clients more holistically and to take into account all aspects of the client experience as perceived and classified by the ICF. For these proposals/projects students select appropriate assessments from professional resources.

Client Proposals (4 through 7) are designed to encourage students to develop a program in brief, and *then* to create their own measurement and assessment tools for the client's use. For these proposals/projects students create appropriate assessments that are modeled after professional resources. They do not use already existing assessments for program rule in/out.

While this design is intensive in terms of assessment question and format development, it does a solid job of giving students an overall understanding of rehabilitative assessment. Both presentations require continuous self-assessment on the part of the students and team, as well as rich instructor feedback.

I'd like to say, without equivocation, that this course owes an incredible debt of gratitude to Larry Michaelsen's Team-based Learning design of course delivery, L. Dee Fink's taxonomy, and Scott Wurdinger's Project based Learning research!

Client Name: We Will Achieve Wellness and Health

Patient Population: Adults (generally 18 – 50) who have suffered traumatic spinal cord injury while engaged in athletics or other leisure activities. The client may consider inclusion of individuals seeking to engage in athletics who have not previously engaged in sports.

Proposed Program: We Will Achieve Sports League has an established pediatric sports program that assists children with SCI to engage in wellness activities. They would now like to start a program that provides a similar opportunity for adults with SCI. WWASL has on staff several prn therapists, as well as two exercise physiologists, one consulting MD, and nursing staff. They have a rich relationship with the community and can engage volunteers.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: A program proposal that would move WWAWH from a pediatric-focused to an adult-focused program and assessment(s) that will inform program administrators, therapists, and the consulting MD as to whether individuals who are interested in the program are appropriate for the program, what these individuals will need, and how the program might be set up.

Client Name: Westminster Regional Hospital

Patient Population: Adults (aged 45 – 75) who have been diagnosed with Parkinson's Disease or Parkinsonism, mild to severe stages.

Proposed Program: The hospital has been offered the opportunity to bid on a new build grant which would be focused on a Parkinson's Clinic and Adult Day Care. The hospital is interested in creating a day program for patients that are either at risk at home alone, or who would benefit from some portion of their day in a therapeutic environment. The program could potentially include life skills activities, community or work hardening/training, outdoor time, field trips, and medical therapies. There is an ancillary budget for some equipment purchases. Therapists from the hospital will be available to assist in the program, and billing of third-party payers, including Medicare, is an option.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: A program proposal that can be forwarded to the grant application office and identification of assessment(s) that will inform program administrators, nursing staff and therapists as to whether an individual patient is appropriate for the program, what the patients will need, and how the program might be set up.

Client Name: Westminster Regional Hospital

Patient Population: Adults (aged 45 – 75) who have been diagnosed with Parkinson's Disease or Parkinsonism, mild to severe stages.

Proposed Program: The hospital has been offered the opportunity to bid on a new build grant which would be focused on a Parkinson's Clinic and Adult Day Care. The hospital is interested in creating a day program for patients that are either at risk at home alone, or who would benefit from some portion of their day in a therapeutic environment. The program could potentially include life skills activities, community or work hardening/training, outdoor time, field trips, and medical therapies. There is an ancillary budget for some equipment purchases. Therapists from the hospital will be available to assist in the program, and billing of third-party payers, including Medicare, is an option.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: A program proposal that can be forwarded to the grant application office and identification of assessment(s) that will inform program administrators, nursing staff and therapists as to whether an individual patient is appropriate for the program, what the patients will need, and how the program might be set up.

Client Name: Kelligan County Regional Hospital

Patient Population: Adults (aged 18 – 55) who have suffered a traumatic brain injury within the past two years, who have made progress with therapy and are being discharged from the hospital but are not yet safe to live at home independently. There is currently no safe place for these individuals to go in the community.

Proposed Program: The regional hospital has been awarded Covid-19 recovery funds, some of which are being funneled to the TBI rehabilitation unit. The hospital is interested in creating a day program for patients that are being discharged from the unit, but who are not ready to be at home alone during the day. The program could potentially include life skills activities, community or work hardening/training, outdoor time, field trips, and continuation of medical therapies. There is an ancillary budget for some equipment purchases. Therapists from the hospital will be available to assist in the program.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

Client Name: Blue Mountain School System

Patient Population: School-aged children (ages 5 – 11), with diagnosed developmental conditions, primarily those related to cerebral palsy. Children will have physical, speech, and possibly behavioral disorders associated with their CP diagnosis as well as comorbidities.

Proposed Program: The school system has received a grant that will permit them to develop an afterschool program for children with special needs, primarily those associated with cerebral palsy. The grant will allow for the hiring of therapists as well as teachers and teaching assistants. The program could potentially include play activities, snack time, outdoor time, field trips, and continuation of school-related therapies. There is an ancillary budget for some equipment purchases.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: An assessment that will inform program administrators, teachers and therapists as to whether individual students are appropriate for the program, what the students will need, and how the program might be set up.

Client Name: We Will Achieve Sports League

Patient Population: Adults who have suffered traumatic spinal cord injury while engaged in athletics or other leisure activities. The client may consider inclusion of individuals seeking to engage in athletics who have not previously engaged in sports.

Proposed Program: We Will Achieve Sports League has an established pediatric sports program that assists children with SCI to play team sports. They would now like to start a program that provides a similar opportunity for adults with SCI. WWASL has on staff several prn therapists, as well as two exercise physiologists, one consulting MD, and nursing staff. They have a rich relationship with the community and can engage volunteers.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: An assessment that will inform program administrators, therapists, and the consulting MD as to whether individuals who are interested in the program are appropriate for the program, what these individuals will need, and how the program might be set up.

Client Name: The Whisco Family Trust

Patient Population: Adults (aged 18 – 55) who have a diagnosis of cerebral palsy that has resulted in moderate to severe disability. Individuals will be community dwellers, or long-term care or assisted living dwellers who are able to leave their facility.

Proposed Program: The trust was established in memory of the daughter of the Whisco family patriarch, who was diagnosed with CP as an infant. She passed away in 2019, at the age of 31. The family would like to create a day program for the enrichment of the lives of adults with CP, inclusive of physical, social, and spiritual elements that serve to improve their lives and maximize their overall wellbeing. They strongly value inclusion of individuals with special needs into the community.

The client has requested both a proposed Measurement and Assessment Tool and some ideas/suggestions for how the program could be designed.

What is needed: An assessment that will inform program administrators, program facilitators and therapists as to whether individuals who are interested in the program are appropriate for the program, what the program should encompass, and how the program might be set up.

C. Modified Wurdinger Questionnaire

Self-Directed Learner	1 Never	2 Rarely	3 Occasionally, if necessary	4 Often but inconsistently; if Necessary	5 Often with Encouragement	6 Usually with Support	7 Usually, little Support	8 Consistently, Self-directed, Autonomous
Goal Setting • Develops small/and larger goals for projects • Develops specific and appropriate objectives • Sets high standards of quality for self • Organizes time and work well • Develops career planning and participation • Develops long-term projects, culminating with successful completion								
Use of Resources • Uses a variety of resources • Assesses information for validity • Generates original ideas • Synthesizes information and expresses own ideas and opinions								

Self-Management • Recognizes strengths and weakness • Demonstrates interest in knowing more about self • Can evaluate use of time in relation to credits, projects, presentations • Sets high standards for self • Takes ownership for own behavior and takes responsibility for the community								
Self-Directed Learner	1 Never	2 Rarely	3 Occasionally, if necessary	4 Often but inconsistently; if Necessary	5 Often with Encouragement	6 Usually with Support	7 Usually, little Support	8 Consistently, Self-directed, Autonomous
Internal Motivation • Develops career planning and participation • Identifies problems, makes own assumptions • Has internal locus of control • Can generate specific tasks for project and standard completion • Perseveres in the face of difficulties • Develops a passion for learning								

	1 Never	2 Rarely	3 Occasionally, if necessary	4 Often but inconsistently; if Necessary	5 Often with Encouragement	6 Usually with Support	7 Usually, little Support	8 Consistently, Self-directed, Autonomous
Self-Evaluation • Assesses own work very well • Journals with perception and understanding • Reflection goes beyond questions asked • Develops own criteria for personal and product evaluation								
Adaptability • Has sufficient learning skills to adapt projects from original design • Has shown creativity and problem solving when beset with problems • Can take initiative and find creative solutions								
Collaboration and Interaction	1 Never	2 Rarely	3 Occasionally, if necessary	4 Often but inconsistently; if Necessary	5 Often with Encouragement	6 Usually with Support	7 Usually, little Support	8 Consistently, Self-directed, Autonomous

Communication skills • Uses writing to communicate ideas, opinions, and perceptions • Uses oral communication to communicate ideas, opinions, and perceptions • Listens actively to others' ideas • Uses the opportunity to contribute in circles, meetings, and in one-on-one with faculty • Continues to improve reading, writing and presentation skills							
Social skills • Effectively responds to other's feelings and perceptions • Accepts others' behavior and lifestyles • Relates effectively within group discussions • Demonstrates understanding and tolerance of others • Stands up for others • Handles confidential information wisely							

Interaction with peers and faculty • Interacts meaningfully with faculty • Interacts meaningfully with peers • Appreciates education, takes responsibility for workspace, learning, academics in general • Represents self and the college well when interacting with those outside of school • Is helpful and caring when asked to work with others • Demonstrates respect and is an open-minded, active listener								
Presentation skills • Introduces self with poise • Identifies significance of project • Acknowledges resources • Makes eye contact, speaks to audience • Speech is relaxed and conversational • Speech is loud enough for everyone to hear • Uses standard English, avoiding slang, etc.								

Leader and organizer								
• Consistently leads others and gets results • Comprehends group roles and responsibilities • Develops synergy rather than hindering results • Can share a vision and follow through • Effectively prioritizes and delegates								

Module 01 Thinking, thinking, thinking

Metacognitive Study Strategies Link: https://learningcenter.unc.edu/tips-and-tools/metacognitive-study-strategies/

Metacognitive Teaching Strategies Link: https://ciel.viu.ca/teaching-learning-pedagogy/designing-your-course/how-learning-works/ten-metacognitive-teaching-strategies

Metacognitive Awareness Inventory: https://services.viu.ca/sites/default/files/metacognitive-awareness-inventory.pdf

Article: Clinicians' Perceptions of Self-assessment in Clinical Practice:

https://etsu.primo.exlibrisgroup.com/permalink/01ETSU_INST/ohp3hf/cdi_proquest_miscellaneous_77481581

Module 02 ICF WHO

World Health Organization ICF Links Homepage:

https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health

Rehadat Link: https://www.rehadat-icf.de/en/

Article: Toward a Common Language of Disablement:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759568/

Article: Medical vs. Biopsychosocial Model – The New Old and the Old New:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5746722/

prompt for *The Medical vs. The Biopsychosocial Model DB*: What are the elements, in your opinion, that most clearly differentiate the two models? What do you think are the strengths and weaknesses of each? Please complete one original post and two responses. Don't forget to cite your sources in APA 7th ed. format.

instructions and link to Creately: Thinking about your client group, select one relevant Body Structure and Function that might be of concern. Using the ICF website and the Rehadat website, build out a sample ICF model diagram of your imagined client's situation. Be creative, but also try to be intentional regarding the specific elements that belong in each square representing categories of the ICF Framework.

Creately link: https://creately.com/diagram/example/ior6gnm43/WHO%20ICF

- If this flowchart cannot be accessed via the link, perform a Google search for "creately AND icf AND flowchart".

Module 03 Body Structure and Function

For this module, I use a Kanopy link to an orthopedic video series in which the practitioner clearly assesses the uninvolved side of the body and compares that to the involved side. Any exemplar assessment that demonstrates assessing only body structure and function (in the Kanopy example – joint and muscle and range of motion and strength, respectively) and not function, will work.

Exemplar Assessment: *Orthopedic Assessment for the Upper Body* @ Kanopy:

https://etsu.kanopy.com/video/orthopedic-assessment-upper-body

ICF Practical Manual: https://cdn.who.int/media/docs/default-source/classification/icf/drafticfpracticalmanual2.pdf?sfvrsn=8a214b01_4

Rehadat Website: https://www.rehadat-icf.de/en/klassifikation/

prompt for *Defying Expectations DB*: Please go to YouTube and explore a medical pathology or diagnosis that interests you (it does not have to be the one your team has been assigned). Locate a video that has been posted by an individual who has been diagnosed with the disorder you've selected, but who has defied the expectations of that diagnosis. Here is an example of what I have in mind for this DB: https://www.youtube.com/watch?v=tJnJ_fTYofQ. In the Discussion Board, discuss: in what way(s) were you surprised by the individual portrayed in the video? Did you have a reason for your surprise? In other words, where did you get your preconceived ideas of what was expected of an individual with your chosen diagnosis? Are you able to identify your own biases regarding these individuals? Do you think that your biases are common among members of your community? Among members of society in general?

Please complete one original post and two responses. Don't forget to cite your sources in APA 7th ed. format.

Application Activity: Deliverable 1 Please see Appendix F

Self-Reflection Prompt: Use this opportunity to reflect on your engagement with your team prior to completing and receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: Now that the first deliverable has been submitted, what are your thoughts about how it developed and came together? If positive, in what way? If negative, in what way? What were some of your most challenging moments and what made them so? How do you feel you, and your team, did in terms of communication? When did your collaborative communications fall short of the team's expectations, if ever?

Peer Review: Please see Appendix G for Peer Review Forms.

Module 04 Activity and Participation

For this module, I use two exemplar assessments. One is the Gross Motor Function Classification System – Expanded & Revised (GMFCS), which provides videos of children for each level of classification and helps students to appreciate that function can be classified into different, specific levels based on observed elements. The module overall provides a framework for function as a result of activities and participation, and the GMFCS is a nice clear example of children engaged in activity. The second exemplar that I use is the Functional Independence Measure (FIM), which shows that, again, an individual's activity and participation can be assessed and measured, and then used in clinical decision-making.

Exemplar Assessments: Exemplar Assessments: Gross Motor Function Classification System – Expanded & Revised:
https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf and the Functional Independence Measure available from physiopedia.com:
https://www.physio-pedia.com/Functional_Independence_Measure_(FIM)

ICF Practical Manual: https://cdn.who.int/media/docs/default-

source/classification/icf/drafticfpracticalmanual2.pdf?sfvrsn=8a214b01_4

Rehadat Website: https://www.rehadat-icf.de/en/klassifikation/

There are many additional resources for this module. They include:

- Assistance Levels as Defined by the FIM, found at: https://integrisok.com/-
  /media/pdf/therapy-students/fim-manual-pdf.ashx?revision=443ff8bb-2e9c-4e05-ae07-
  962e932fc21b&la=en&hash=CCC068DE5BDC223532D9445C6EEBA9D1BFA15567

- *Toward a Common Language of Disablement* found at:
  https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759568/

- *Physical activity is associated with functional capacity of older women with osteosarcopenic
  obesity: 24-month prospective study*, found at: https://pubmed.ncbi.nlm.nih.gov/31551532/

- *The learned nonuse phenomenon: Implications for rehabilitation* found at:
  https://www.minervamedica.it/en/journals/europa-
  medicophysica/article.php?cod=R33Y2006N03A0241

- *Katz Index of Independence in Activities of Daily Living* found at:
  https://www.alz.org/careplanning/downloads/katz-adl.pdf

- *Self-Care Assessment* found at:
  https://socialwork.buffalo.edu/content/dam/socialwork/home/self-care-kit/self-care-
  assessment.pdf

- *FIM Manual* found at: https://integrisok.com/-/media/pdf/therapy-students/fim-manual-
  pdf.ashx?revision=443ff8bb-2e9c-4e05-ae07-
  962e932fc21b&la=en&hash=CCC068DE5BDC223532D9445C6EEBA9D1BFA15567

- Positive Psychology found at: https://positivepsychology.com/quality-of-life-questionnaires-assessments/

- *HealthyPeople.gov* found at: https://www.healthypeople.gov/2020/about/foundation-health-measures/Health-Related-Quality-of-Life-and-Well-Being

Resource for Independent Assignment: <mark>Assess an assessment</mark>

Psychometric Properties found at: https://www.physio- pedia.com/Psychometric_Properties

<mark>Discussion Board</mark> prompt for *Constraint-Induced Therapy DB*: After watching the *Introduction to CIMT* video (https://elearn.etsu.edu/d2l/le/content/8474697/viewContent/69679124/View) in this module, find a time when you can experience something moderately similar for yourself. While you obviously will not have experienced a stroke, I want you to wear an oven mitt on your dominant hand and constrain the use of your dominant arm by wrapping it against your body with an ace bandage wrapped around your trunk and hidden under your sweatshirt (it will look like you have no arm) while you go about your daily activities - for one full day. At the end of the day, in the discussion board, debrief your response to the activity. How do you think a client who has lost full function of a hand, leg, or up to half of their body feels? This is represented by a loss of the ability to engage in activity and, by extension, participation with their environment.

This assignment requires that you submit a minimum of ten photos of yourself throughout the day, engaged in different activities. Since photos are required, you may elect to submit this as a PowerPoint, or in any other photo-friendly format that you can think of, up to and including sending it to my email. Please complete one original post and two responses. Don't forget to cite your sources in APA 7th ed. format.

prompt for *Values Inventory DB*:

Complete the *Values Inventory (Schwartz Portrait Values)* found at:

https://discovermyprofile.com/tests and then come into the discussion board and muse over your

results. Do your values primarily come from your family, culture, religion, etc. or do they come

from the school of hard knocks, life experience, paradigmatic restructuring? Did anything in your

values inventory surprise you? Have you clearly thought out your values previously? Do you

believe that values can, and do, change throughout our lives? Can you identify and articulate any

of your own values that have evolved and what the catalyst for change was?

Discussion Board prompt for *End-of-Life and decision-making capacity DB*: Please read the material

found in the article *Evaluating Medical Decision-Making Capacity*

(https://www.aafp.org/afp/2018/0701/p40.html). Note that in this article, the client's long-held values

are not at the forefront of deciding capacity. This is a clear case of paternalism. Look up

"paternalism". What do we mean when we use this term, especially in healthcare?

Watch: *https://www.youtube.com/watch?v=J_EKwSXOsVE*

Thoughts? This DB is about engaging with this material, your values, your Quality-of-Life

assessment, and how all of that relates to your end-of-life choices. If you don't have a chronic

disability or illness, do you think having one would change anything? Why or why not? Are you

revealing a bias?

Please complete one original post and two responses. Don't forget to cite your sources in APA 7th

ed. format.

Application Activity: Deliverable 3 Please see Appendix F

: Use this opportunity to reflect on your engagement with your team prior to receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: Considering the work that you and your team have engaged in over the course of the last module, think about and respond to the following questions:

1. What skills did you use to manage your exploration of the topic? How did you ensure that you did enough so that you were able to contribute to your team's efforts?

2. How could you have done what you did for this module differently? Better? Did your peers do anything in a way that you might adopt in the future?

3. What is working for you in terms of the team's interaction? What isn't? Are there things that need to be talked about in the team meetings?

4. Are you an asset to your team? Are there ways in which you can bring more to the team? Are you starting to notice others' strengths as well?

Peer Review: Please see Appendix G for Peer Review Forms.

Module 05 Environmental Factors

For this module, I use two environmental assessments that can be easily understood by lay people. The first is for a home assessment, and the second is for a public building assessment.

Exemplar Assessments: ADA Checklist found @ https://www.adachecklist.org/checklist.html

ADA Checklist for Existing Facilities (https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf

This module also makes continued use of:

ICF Practical Manual: https://cdn.who.int/media/docs/default-source/classification/icf/drafticfpracticalmanual2.pdf?sfvrsn=8a214b01_4

Rehadat Website: https://www.rehadat-icf.de/en/klassifikation/

<mark>Discussion Board</mark> prompt for *Environmental Press DB*: For part one of the Environmental Press Discussion Board, think about a time when you found yourself in a mismatched environment. How did you feel? How did you cope? How did it turn out?

For part two, note that the ICF identifies both facilitators and barriers in the environment. What were some facilitators, if any, and what were some barriers, if any, in the example you gave for part one? To what level did these elements hinder or help you to succeed?

Please complete one original post and two responses. Don't forget to cite your sources in APA 7th ed. format.

<mark>Discussion Board</mark> prompt for *Public Building Assessment Team DB*: You will be working with your team to perform a public building assessment. You can choose any public building that is more than 15 years old, on campus or off, but I recommend a restaurant or retail establishment. You will use the ADA Checklist for Existing Facilities (https://www.adachecklist.org/doc/fullchecklist/ada-checklist.pdf) to complete your assessment. The instructions for how to perform the survey of the property are included in the document. Please read the whole document and prepare yourselves

before going out to do the assessment. Imagine that you are performing the assessment with members of your assigned patient population in mind. Submit your completed Checklist to the Dropbox for this assignment.

Answer the following questions:

1. Would you, if you had the diagnosis that you imagined, go to this place of business? Why or why not?

2. Did anything about the assessment surprise you?

3. Do you think that the building you assessed in unique in any way for your community?

4. Do you have any thoughts about how accessibility might hinder community access for people with disabilities based on your assessment?

What would be your top three recommendations for change for your building's owner?

Discussion Board prompt for *Grit and Locus of Control DB*: Please complete the Grit Scale, found at: https://angeladuckworth.com/grit-scale/

Then go to https://my-personality-test.com, navigate to the Locus of Control test, and take that. In the Discussion Board, reflect on your results. Do you feel that these two "tests" accurately reflect your personality and temperament? Do you think that you are different in different settings? That you've changed as you've grown older or found yourself in different circumstances? What have you learned through the presentations on grit, locus of control, and self-efficacy – for yourself and your future patients.

Application Activity: Deliverable 3 Please see Appendix F

Self-Reflection Prompt: Use this opportunity to reflect on your engagement with your team prior to receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: People frequently report a high level of grit and an internal locus of control because we all want to see ourselves in the most positive light. And yet, if you are now most of the way into a long semester, you may be struggling to stay focused, to keep up with work, or to do all of the things that your courses require of you. Do you think that you are exhibiting grit?

1. During this module, did you spread out your workload to make it manageable? Or did you find yourself cramming and doing things in a rush?

2. Do you find yourself able to re-engage when you become tired or distracted? What are the ways that you do that?

3. Has your team started to develop good communication strategies? Good teamwork skills?

Peer Review: Please see Appendix G for Peer Review Forms.

Module 06 Program Proposal

Module 06 has no new inclusions. It does require completion of the Modified Wurdinger Questionnaire, Appendix C.

Self-Reflection Prompt: Use this opportunity to reflect on the course as a whole, your learning and participation, and how your feelings about the content changed, if they did. Reflect on your Wurdinger changes, if any.

Peer Review: Please see Appendix G for Final Peer Review Form.

E. iRATs/tRATs

Module 02

Q1. Which of the following are levels of the Nagi Model of Disability? (Select all that apply)

      a) Pathology

      b) Physiology

      c) Impairment

      d) Participation

      e) Disability

Q2. What is the primary criticism of medical models of disability?

      a) They decrease the efficiency of practice for medical professionals

      b) They are unable to account for comorbidity and chronicity

      c) They do not consider all factors that lead to disability

      d) They are payment, and not client, centered

      e) They are outdated

Q3. What factors does the ICF identify as important that the Nagi and other medical models did not? (Select the best answer)

      a) Social and societal support

      b) Insurance or lack of insurance

      c) Environmental and personal factors

      d) Client/client preferences

      e) Quality of life measures and client values

Q4. Which of the following are categories of the ICF? (Select all that apply)

a) Health condition (disease or disorder)

b) Body function and structure

c) Impairment

d) Activities

e) Personal factors

Q5. Which ICF category is the inverse (or opposite) of the Nagi functional limitation

category? (Select the best answer)

a) Health condition (disease or disorder)

b) Body function and structure

c) Impairment

d) Activities

e) Personal factors

Module 03

Q1. In in-depth knowledge and understanding of body structure and function may permit a practitioner to predict:

    a) the way in which a client will present in the clinic

    b) the way dysfunction will present

    c) the impairments with which a client will present

    d) the disability with which a client will present

Q2. Which of the following would not be appropriately defined as body structure or body function?

    a) Cognitive deficit resulting in confusion

    b) Poor upright trunk and head control

    c) Blindness or limited vision

    d) Inability to perform activities of daily living

Q3. A decision-making model that is focused on the individual's interaction with society and his/her ability to access the community is what type of model?

    a) Social

    b) Biopsychosocial

    c) Medical

    d) Psychosocial

Q4. A clinician who assumes that every client who has a diagnosis of spina bifida will be unable to ambulate independently is leaning on which heuristic?

    a) Representativeness

    b) Availability

c) Simple problem substitution

d) Prediction

Q5. Which of the following is the MOST representative of the inverse of the Nagi

Model's functional limitation category?

a) Health condition (disease or disorder)

b) Body function and structure

c) Impairment

d) Participation

e) Personal factors

Module 04

Q1. Assessments of function should be evaluated for which of the following strengths?
(Select all that apply)

 a) Validity

 b) Reliability

 c) Ease of use

 d) Usable outcomes

Q2. An assessment that is quick and easy, but that fails to produce results that can be used for goal setting is:

 a) considered neither valid nor reliable

 b) still potentially useful for screening

 c) of no use to licensed clinicians

 d) useful only for creating categories of patients/clients

Q3. The degree to which the scores of an instrument are consistent with hypotheses based on the assumption that the tool measures the item(s) or idea(s) to be measured, is:

 a) criterion validity

 b) internal consistency

 c) construct validity

 d) interpretability

Q4. An example of a criterion-referenced assessment tool is:

 a) A tool that measures intelligence quotient (IQ)

 b) A tool that measures a patient's retained strength following a stroke

 c) A tool that assesses a patient with spina bifida's ambulatory status

d) A tool that measures a child's attainment of gross motor milestones

Q5. Which of the following is most influential in regard to a patient's participation and engagement in rehabilitation?

    a) Educational level

    b) Values and beliefs

    c) Social support system

    d) Prior level of function

Module 05

Q1. The environmental press-competence model can be best described as a model that:

    a) describes how an individual can improve their approach to dealing with stressful or challenging situations

    b) describes an individual's ability to adapt to stress based on their competence and personal characteristics

    c) describes predictors of an individual's likelihood of success or failure when challenged

    d) describes the level of challenge that an individual can tolerated based primarily on his or her previous experiences

Q2. According to the environmental press-competence model, a patient who is attending a post-injury program should be:

    a) allowed to choose activities that make him feel comfortable

    b) challenged to engage in activities at which he may need to work to succeed

    c) pushed to engage in activities that are currently beyond his capabilities

Q3. The environmental press-competence model is best applied to:

    a) health activities

    b) academic activities

    c) leisure activities

    d) any of the above

Q4. Which of the following is not an element of the personal factors domain?

    a) gender

    b) health conditions specific to the individual

c) coping style

d) social background

Q5. Of the personal factors discussed, the one most likely to predict one's willingness to

trudge, is:

a) grit

b) locus of control

c) self-efficacy

F. *Question Prompts for Self-Reflection Discussion Boards*

Self-Reflection One: Introduction – Your first self-reflection is an opportunity to talk about your thoughts regarding metacognition and the Modified Wurdinger Questionnaire, if you like, but also an opportunity for you to jot down your thoughts about the project that this course requires – one that is poorly defined and allows for a good deal of team freedom. What are your thoughts? Are they positive? Negative? Do you think it will be fun or overwhelming? Somewhere in between? Do you feel equipped to take it on? Do you feel like you have a good team? Are you prepared to work with a team?

Self-Reflection Two: Communication – Use this opportunity to reflect on your engagement with your team prior to completing and receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: Now that the first deliverable has been submitted, what are your thoughts about how it developed and came together? If positive, in what way? If negative, in what way? What were some of your most challenging moments and what made them so? How do you feel you, and your team, did in terms of communication? When did your collaborative communications fall short of the team's expectations, if ever?

Now that the first deliverable has been submitted, what are your thoughts about how it developed and came together? If positive, in what way? If negative, in what way? What were some of your most challenging moments and what made them so? How do you feel you, and your team, did in terms of communication? When did your collaborative communications fall short of the team's expectations, if ever?

Self-Reflection Three: Metacognition – Use this opportunity to reflect on your workflow and resource management as well as your interaction with your team prior to completing and receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: Considering the work that you and your team have engaged in over the course of the last module, think about and respond to the following questions:

1. What skills did you use to manage your exploration of the topic? How did you ensure that you did enough so that you were able to contribute to your team's efforts?

2. How could you have done what you did for this module differently? Better? Did your peers do anything in a way that you might adopt in the future?

3. What is working for you in terms of the team's interaction? What isn't? Are there things that need to be talked about in the team meetings?

4. Are you an asset to your team? Are there ways in which you can bring more to the team? Are you starting to notice others' strengths as well?

Self-Reflection Four: Grit – Use this opportunity to reflect on your engagement with your team prior to receiving your peer reviews. Complete Peer Reviews and Self-Reflection AFTER turning in the Deliverable. Complete Self-Reflection prior to completing Peer Reviews.

Prompt: People frequently report a high level of grit and an internal locus of control because we all want to see ourselves in the most positive light. And yet, if you are now most of the way into a long semester, you may be struggling to stay focused, to keep up with work, or to do all of the things that your courses require of you. Do you think that you are exhibiting grit?

1. During this module, did you spread out your workload to make it manageable? Or did you find yourself cramming and doing things in a rush?

2. Do you find yourself able to re-engage when you become tired or distracted? What are the ways that you do that?

3. Has your team started to develop good communication strategies? Good teamwork skills?

G. *Sample Peer Review Forms*

The Peer Review (or Evaluations) are completed following submission of Deliverables one through the final deliverable (Deliverable Four); the first three Peer Reviews (completed after Deliverables one through three) are anonymously shared with peers, the final (completed after Deliverable four) is private to the instructor.

RHSC 4300 Peer Evaluation Revised

* Required

1. Team Member Being Evaluated *

2. Your Name: *

3. Score - Divide your 40 points available; no one team member can earn "10" points - Enter as score/40 (e.g. 10/40) *

4. Attends team activities; arrives on time *

◯ Never

◯ Sometimes

◯ Often

◯ Always

5. Demonstrates a good balance of active listening and participation *

◯ Never

◯ Sometimes

◯ Often

◯ Always

6. Asks probing questions *

◯ Never

◯ Sometimes

◯ Often

◯ Always

7. Shares information and understanding *

○ Never

○ Sometimes

○ Often

○ Always

8. Shares resources *

○ Never

○ Sometimes

○ Often

○ Always

9. Is well prepared for team activities *

○ Never

○ Sometimes

○ Often

○ Always

10. Shows appropriate depth of knowledge *

◯ Never

◯ Sometimes

◯ Often

◯ Always

11. Identifies limits of knowledge *

◯ Never

◯ Sometimes

◯ Often

◯ Always

12. Shows confidence in areas of understanding *

◯ Never

◯ Sometimes

◯ Often

◯ Always

13. Gives instructive feedback *

　　○ Never

　　○ Sometimes

　　○ Often

　　○ Always

14. Accepts instructive feedback *

　　○ Never

　　○ Sometimes

　　○ Often

　　○ Always

15. Shows care and concern for others *

　　○ Never

　　○ Sometimes

　　○ Often

　　○ Always

16. Comments to help develop your classmate's skills and performance: *

9/26/2021

RHSC 4300 Final Peer Evaluation

This final peer evaluation will be private - you will submit it only to Dr. Schroder to be calculated into your teamates' peer grades. Please be honest and also ask yourself: Is what I'm saying true? Is it necessary? Is it kind? While I don't expect that team members who did not participate in the work will receive the same grade as those who did, I do expect that peer assessments will be objective and professional, and not personal. Avoid all ad hominem attacks.

* Required

* This form will record your name, please fill your name.

1. Teammate you are reviewing: *

2. Your name: *

[   ]

3. If you had 10 possible points to give this team member for his/her overall participation, how many would you give?

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

4. The reason(s) for your review: *

[   ]

H. Guidelines for Deliverables

Module 03 Deliverable 1 Body Structure and Function

Individual Deliverable Instructions: For this, and all following individual deliverables, you are to put

into the Dropbox artifacts of your research, brainstorming, and task pursuit in support of your team

during the creation of Deliverable 1. Since you have each accepted a professional role, it is expected

that you are bringing to each team meeting information that is appropriate to your role, in support of

the project development. You can include in your artifacts anything that supports your engagement

in the team's activities. For example, you might bring a list of your search terms, what you

discovered, and journal articles that speak to the body structures and functions most likely to be

involved for your client group. You might bring copies of relevant articles, or information found at a

professional medical site or family support site. You may bring a list of proposed activities that you

think would address specific structure and function issues within the program you team is creating.

You might bring interesting assessments that you've found.

Your individual deliverable materials must support your work as a member of the team. They must

demonstrate your participation in moving your project forward, in your assigned role, and be

relevant to the module material. While there is no set amount of information or items that must be

submitted, your artifacts should be in line with those of other members of your team and should

demonstrate college-level thinking and research.

Deliverable ONE Team Deliverable Instructions: For this first deliverable, your team is to focus on

the body structures and functions that are most likely to be involved for a client with the diagnosis

that you've been assigned. You will work together to demonstrate that you have gone to the

resources and, using ICF language, identified all components of structure and function that your team, as program developers, will have to consider.

Additionally, you should prepare a rough proposal of your program ideas. Since this is your first iteration, and you have not yet identified activities, participation, and personal factors related to your client population, this proposal will be broad and filled with ideas, based on your Client Proposal, but not yet fully formed or evolved. That evolution will happen throughout the course.

Module 04 Deliverable 2 Activity and Participation

Individual Deliverable Instructions: For this, and all following individual deliverables, you are to put into the Dropbox artifacts of your research, brainstorming, and task pursuit in support of your team during the creation of Deliverable 2. Since you have each accepted a professional role, it is expected that you are bringing to each team meeting information that is appropriate to your role, in support of the project development. You can include in your artifacts anything that supports your engagement in the team's activities. For example, you might bring a list of your search terms, what you discovered, and journal articles that speak to the activities in which an individual with whom a member of your profession would be likely working on in therapy, or for which rehabilitation goals would be set. You might find a website that demonstrates the types of accommodations needed for an individual with your assigned disability, or the types of assistive technology he/she may use. You might bring copies of relevant articles, or information found at a professional medical site or family support site. You may bring a list of proposed participation opportunities that you think would address specific values and QoL issues likely to exist for your target population. You might bring interesting QoL assessments that you've found.

Your individual deliverable materials must support your work as a member of the team. They must demonstrate your participation in moving your project forward, in your assigned role, and be relevant to the module material. While there is no set amount of information or items that must be submitted, your artifacts should be in line with those of other members of your team and should demonstrate college-level thinking and research.

Deliverable TWO Team Deliverable Instructions: For this second deliverable, your team is to focus on the activities and participation that are most likely to be involved for a client with the diagnosis

that you've been assigned, as well as those activities and opportunities for participation that are most important for your program. You need to start thinking about how you will assess values, Quality of Life, and ways in which you can engage your target participants values and goals in order to ensure their success within your program. If you are creating an assessment for inclusion in your program, you will create questions related to all of these – values, Quality of Life, activities and participation currently engaged in, and those the participant would like to engage in.

You will work together to demonstrate that you have gone to the resources and, using ICF language, identified all components of activity and participation that your team, as program developers, will have to consider.

At this point, you are ready to submit a proposal of your program ideas. Return to your first iteration, and the feedback that you received and revise accordingly. You will now bring together your revised first deliverable and this second deliverable, submitting a larger and more fully developed product, a second draft, for feedback.

Module 05 Deliverable 3 Environmental and Personal Factors

Individual Deliverable Instructions: This is your final individual deliverable. As with previous individual deliverables, you are to put into the Dropbox artifacts of your research, brainstorming, and task pursuit in support of your team during the creation of Deliverable 3. Since you have each accepted a professional role, it is expected that you are bringing to each team meeting information that is appropriate to your role, in support of the project development. You can include in your artifacts anything that supports your engagement in the team's activities. For example, for this deliverable, you may look for advocacy sites related to the disabilities that individuals who are potential participants for your program may have – ask what environmental issues they may face and be open to challenges they may deal with that you wouldn't have previously considered. How will you and your team address these environmental challenges? How will you collect information about them? You might bring copies of relevant articles, or information found at a professional medical site or family support site. You may also want to pursue legal information or community help information, as it is likely that there are resources available that you could offer your participants. Your individual deliverable materials must support your work as a member of the team. They must demonstrate your participation in moving your project forward, in your assigned role, and be relevant to the module material. While there is no set amount of information or items that must be submitted, your artifacts should be in line with those of other members of your team and should demonstrate college-level thinking and research.

Deliverable TWO Team Deliverable Instructions: For this second deliverable, your team is to focus on the environmental limitations and facilitators that are most likely to be present for a client with the diagnosis that you've been assigned, as well as those that are most important for your program.

You need to start thinking about how you will assess each individuals limitations and facilitators, and how you will provide facilitators within your program design.

You will also have to consider for this module what you wish to consider within the domain of personal factors. What elements of personal make-up matter in your program? What do you want or need to know about participants? How will you know? And how will you use information you gather? What is the ethical burden of gathering personal information?

You will work together to demonstrate that you have gone to the resources and, using ICF language, identified all components of environment and personal factors that your team, as program developers, will have to consider.

Remember to return to your previous iterations, and the feedback that you received and revise accordingly. You will now bring together your revised first two deliverables and this third deliverable, submitting a larger and more fully developed product, as a third draft, for feedback.

Module 06 Final Deliverable Program Proposal

For this final deliverable, team work together to complete their assessments and/or program

proposals. Using all of the feedback that they have received thus far, they create one complete

project, with all of the inclusions necessary to present a complete picture of what they are going to

present to the client. In general, they must ensure that their assessment is complete and includes all

necessary elements as outlined in the ICF (I do not have them divide their assessments according to

the modules or the ICF, but as they wish to divide them), and that their program is complete and

answers not only the original client proposal, but also all of the items that they determined were

relevant as they worked through the term and the different aspects of the ICF framework for their

potential program participants. I permit students the freedom to present in any manner they choose,

to include via video, slide presentation, brochure/written product, etc. My rubric for grading is

included with my syllabus, in Appendix A. I have the clients complete an informal feedback form as

well.

References

Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing house, 83*(2), 39-43. https://doi.org/10.1080/00098650903505415

Bettger, J. P., Zhao, X., Bushnell, C., Zimmer, L., Pan, W., Williams, L. S., & Peterson, E. D. (2014, 2014/03/26). The association between socioeconomic status and disability after stroke: Findings from the Adherence eValuation After Ischemic stroke Longitudinal (AVAIL) registry. *BMC Public Health, 14*(1), 281. https://doi.org/10.1186/1471-2458-14-281

Borkowski, J., Carr, M., Rellinger, E., & Pressley, M. (1990). *Self-Regulated Cognition: Interdependence of Metacognition, Attributions, and Self-Esteem* (B. F. Jones & L. Idol, Eds.). Lawrence Erlbaum.

Burgess, A., van Diggele, C., Roberts, C., Mellis, C. (2020). *Team-based learning: Design, facilitation and participation*. BMC Medical Education. Retrieved September 17 from https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-020-02287-y

Colthorpe, K., Ogiji, J., Ainscough, L., Zimbardi, K., & Anderson, S. (2019, 05). Effect of Metacognitive Prompts on Undergraduate Pharmacy Students' Self-regulated Learning Behavior. *Am J Pharm Educ, 83*(4), 6646. https://doi.org/10.5688/ajpe6646

Dos Santos, V. R., & Gobbo, L. A. (2020, Jun). Physical activity is associated with functional capacity of older women with osteosarcopenic obesity: 24-month prospective study. *Eur J Clin Nutr, 74*(6), 912-919. https://doi.org/10.1038/s41430-019-0505-y

Fink, L. D. (2003). *What is "Significant Learning"?* https://www.wcu.edu/WebFiles/PDFs/facultycenter_SignificantLearning.pdf

FitzGerald, C., & Hurst, S. (2017). Implicit bias in healthcare professionals: a systematic review. *BMC medical ethics, 18*(1), 19-19. https://doi.org/10.1186/s12910-017-0179-8

Gouveia, V. V., Vione, K. C., Milfont, T. L., & Fischer, R. (2015, Sep). Patterns of Value Change During the Life Span: Some Evidence From a Functional Approach to Values. *Pers Soc Psychol Bull, 41*(9), 1276-1290. https://doi.org/10.1177/0146167215594189

Haidet, P., Levine, R. E., Parmelee, D. X., Crow, S., Kennedy, F., Kelly, P. A., Perkowski, L., Michaelsen, L., & Richards, B. F. (2012, Mar). Perspective: Guidelines for reporting team-based learning activities in the medical and health sciences education literature. *ACAD MED, 87*(3), 292-299. https://doi.org/10.1097/ACM.0b013e318244759e

Hogan, A. J. M. A. P. (2019). Social and medical models of disability and mental health: evolution and renewal. *Canadian Medical Association journal (CMAJ), 191*(1), E16-E18. https://doi.org/10.1503/cmaj.181008

[Record #441 is using a reference type undefined in this output style.]

Jette, A. M. (2006). Toward a Common Language for Function, Disability, and Health. *Physical Therapy, 86*(5), 726-734. https://doi.org/10.1093/ptj/86.5.726

Lichtenberg, P. A., MacNeill, S. E., & Mast, B. T. (2000, Oct). Environmental press and adaptation to disability in hospitalized live-alone older adults. *Gerontologist, 40*(5), 549-556. https://doi.org/10.1093/geront/40.5.549

Lo Buono, V., Corallo, F., Bramanti, P., & Marino, S. (2017). Coping strategies and health-related quality of life after stroke. *Journal of Health Psychology, 22*(1), 16-28. https://doi.org/10.1177/1359105315595117

McDougall, J., Wright, V., Schmidt, J., Miller, L., & Lowry, K. (2011). Applying the ICF framework to study changes in quality-of-life for youth with chronic conditions. *Developmental neurorehabilitation, 14*(1), 41-53. https://doi.org/10.3109/17518423.2010.521795

Meyer, K., & Wurdinger, S. (2016). Students' Perceptions of Life Skill Development in Project-Based Learning Schools. *Journal of Educational Issues, 2*(1), 91.

Michaelsen, L. K., Bauman Knight, A., & Fink, L. D. (2004). *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*. Stylus.

Michaelsen, L. K., Parmelee, D. X., McMahon, K. K., & Levine, R. E. (Eds.). (2008). *Team-Based Learning for Health Professions Education* (1st ed.). Stylus.

Mpofu, E., & Oakland, T. (2010). *Rehabilitation and health assessment : applying ICF guidelines*. Springer.

n.a. (2002). *Towards a Common Language for Functioning, Disability and Health*. WHO. https://cdn.who.int/media/docs/default-source/classification/icf/icfbeginnersguide.pdf?sfvrsn=eead63d3_4

n.a. (2014). *A Primer on How Students (and All Humans) Learn*. Educational Research. Retrieved September 17 from https://dataworks-ed.com/blog/2014/07/the-information-processing-model/

Papinczak, T., Young, L., Groves, M., & Haynes, M. (2007, Jun). An analysis of peer, self, and tutor assessment in problem-based learning tutorials. *Med Teach, 29*(5), e122-132. https://doi.org/10.1080/01421590701294323

Rohan, M. J. (2000, 2000/08/01). A Rose by Any Name? The Values Construct. *Personality and Social Psychology Review, 4*(3), 255-277. https://doi.org/10.1207/S15327957PSPR0403_4

Taub, E., Uswatte, G., Mark, V. W., & Morris, D. M. M. (2006). The learned nonuse phenomenon: implications for rehabilitation. *Europa medicophysica, 42*(3), 241.

What is PBL. (2021). Buck Institute for Education. Retrieved September 20 from
https://www.pblworks.org/what-is-pbl

Wurdinger, S., Newell, R., & Kim, E. S. (2020). Measuring life skills, hope, and academic growth at project-based learning schools. *Improving schools*, 136548022090196.
https://doi.org/10.1177/1365480220901968