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Universal Design for Learning in Postsecondary Settings:
One Faculty Member's Journey Toward Making Learning Accessible for *all* Students¹

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Abstract

This paper presents a description of a project designed to field test a research-developed faculty development series on embedding Universal Design for Learning (CAST, 2011) into curriculum, instruction, and assessment. A description of Goodwin College, where the project was enacted, is presented. Goodwin is a four-year private not-for-profit postsecondary institution with an open admissions process and is similar in many ways to Connecticut's community colleges. Highlights from and reflections on the journey of translating knowledge and skills gained are offered as examples of how professional development in universal design can affect faculty practice.

Student Diversity and the Open-Access College

Postsecondary intuitions in general and open-access two- and four-year colleges in particular continue to face student populations with increasingly diverse academic and non-academic needs. As for open-access colleges, these schools make postsecondary education available to students who might otherwise be denied access to college because they do not meet the enrollment criteria of more selective institutions (e.g., required scores on college entrance tests, high school grades; Brock, 2010). Notably, open-access two- and four-year colleges are primarily responsible for recent increases in college graduation rates (Doyle, 2010). Were it not for these colleges, many students from educationally disadvantaged backgrounds might never be afforded an opportunity to obtain a college degree (Shannon & Smith, 2006).

Open-access colleges tend to serve a much more diverse student body than do many of their more selective counterparts (Center for Community College Student Engagement, 2012; Kisher & Outcalt, 2005; Shannon & Smith, 2006). Although there are students at all types of colleges who are challenged to meet academic expectations, open-access colleges are more likely to enroll students who have characteristics that research has shown make them more “academically vulnerable” (Mechur Karp, 2011). The characteristics include being from underrepresented minority groups, having low socioeconomic status, being underprepared for college-level work, or having parents with little to no college experience.

Relative to population share, open-access colleges serve disproportionately more Black and Hispanic students (Carnevale & Strohl, 2013). They are also more apt to enroll students who are the first in their families to attend college (i.e., first generation). First-generation students tend to experience more difficulties in adjustment to college (Hertel, 2002) and know less about college life (Engle, Bermeo, & O’Brien, 2006; Billson & Brooks-Terry, 1982). Adding to the

diversity of the open-access college student body, a majority of individuals works fulltime while taking classes (Bailey & Jacobs, 2009; Gerstein, 2010; Levin & Calcagno, 2008). Many are women who have dependents, which can present additional challenges (e.g., childcare) as they attempt to complete their degree (Waiwaiole & Noonan-Terry, 2008; Miller, Gault, & Thorman, 2011).

Several researchers have found that students in open-access colleges are underprepared for college-level work (Bailey & Cho, 2010; Bailey & Jacobs, 2009; Brock, 2010; Bueschel, 2008). The term underprepared is used in the literature to describe those individuals who upon enrollment in postsecondary education lack the knowledge and skills needed to achieve academic success. These individuals ordinarily require additional preparation before beginning credit-bearing coursework (Attewell, Lavin, Domina, & Levey, 2006; Bailey, 2009; Barr & Scheutz, 2008). The additional preparation is often a requirement to complete a developmental, or remedial, course in at least one subject area, most often English or mathematics (Attewell et al., 2006; Bustillos, 2012; Center for Community College Student Engagement, 2012; Hoyt, 2009).

Race, ethnicity, and parental education can each affect the likelihood of students needing remedial, developmental, or other courses that are intended to bring students' basic academic skills to competency levels expected of new college entrants. Notably, the National Center for Education Statistics (2012) reported that 60% of students who identified themselves as Black and 61.5% of students who identified themselves as Hispanic took at least one remedial course compared to only 46.0% of students who identified themselves as White. Similarly, 57.2% of first-generation college students reported taking at least one remedial course. These are important facts to consider because nearly half of students who identify themselves as Black or African American and nearly half of those who are first-generation attend open-access colleges.

Faculty Readiness to Instruct a Diverse Student Body

Overall, the wide-ranging demographic, academic, and nonacademic diversity in the open-access college student population presents faculty with the pedagogical challenge to support the goal of learning for *all* students. On the one hand, U.S. policies such as the landmark No Child Left Behind Act of 2001 (2002) have placed a significant focus on ensuring there is a highly qualified teacher in every elementary and secondary classroom and that teachers use evidence-based curriculum and teaching methods. Additionally, accreditation of elementary and secondary teacher preparation programs requires the development of candidates' content specific teaching knowledge *and* general pedagogical knowledge (NCATE, n.d.). On the other hand, similar policies and practices do not exist for the preparation of faculty teaching in U.S. postsecondary institutions (Jensen, 2011).

College faculty members ordinarily have no formal teacher training, background in pedagogy, or experience in curriculum design (Sorcinelli, Austin, Eddy, & Beach, 2005; Tinto, 2011). To this point, Lail (2009) explained, "content mastery is a critical requisite in the faculty selection process, pedagogical proficiency beyond the ability to lecture is rarely a consideration" (p. 1). Said differently, faculty members are expected to have disciplinary expertise but expertise in teaching is not an expectation. The general lack of knowledge in instructional design, implementation, and assessment is particularly troublesome given the academic diversity of the students enrolled in the open-access four-year college where this project was carried out.

Applying the Philosophy of Universal Design to Address Diverse Learning Needs

Researchers have examined a variety of strategies to meet the diverse needs of learners in higher education (Bailey, 2009; Schuetz, 2008; Smith, 2007) and the methods used in open-access colleges to improve student outcomes (Hatch, 2012). Learning communities (Smith, 2010;

Tinto, 2003), peer tutoring (Schuetz, 2008), and supplemental instruction (Bailey, 2009) are among additive approaches that have proven successful to one degree or another. Nevertheless, each of these strategies is typically offered alongside the regular credit-bearing college course, or students might need to actively seek assistance, such as peer tutoring, through a college's academic skills center.

Universally designed curriculum, instruction, and assessments are alternatives to additive educational strategies that are intended to address various learning needs of students who might be underprepared for college-level coursework. The concept of universal design emerged in the 1980s as an approach to making physical environments and products accessible to persons with disabilities (Banfield-Hardaway, 2010; Izzo, Murray, & Novak, 2008; Orr & Hammig, 2009). Juxtaposed to simply trying to remediate students' individual difficulties with learning, which is reactionary, those who embrace the philosophy of universal design begin at the design stage and intentionally develop classroom environments, processes, or instruction that address the broadest array of abilities possible (Burgstahler, 2008).

As applied in education, Burgstahler (2008) explained, proactively designed curriculum, instruction, and assessments have as their "goal the full inclusion of *all* students—regardless of gender, race, place of origin, first language, learning style, culture, background knowledge, disability and other characteristics" (p. 24). Several researchers have developed educational models that incorporate the philosophy of universal design with each building on evidence-based instructional strategies known to improve the academic performance of students with varied abilities (Burgstahler, 2008; CAST, 2011; Higbee & Goff, 2008; McGuire & Scott, 2006; Rose, Harbour, Johnston, Daley, & Abarbanell, 2006; Scott, McGuire, & Foley, 2003). Irrespective of

their emphases, all of the models are founded in the belief the problem rests in the learning environment and not within individual students.

From among the various models, Universal Design for Learning (CAST, 2011) was used in the professional development pilot described in this paper because the approach is written into several sections of the Higher Education Opportunity Act of 2008. Included in Section 103(a) of the act is a statutory definition of universal design for learning.

(24) UNIVERSAL DESIGN FOR LEARNING.—The term ‘universal design for learning’ means a scientifically valid framework for guiding educational practice that—

(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

(B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

An underlying assumption of Universal Design for Learning (CAST, 2011) is that students learn best when provided with multiple opportunities and a variety of methods to access and apply knowledge. The model encompasses three broad principles and nine related guidelines that center on using a variety of ways to: (a) present information and content, (b) provide opportunities for students to express what they know, and (c) stimulate interest and motivation for learning. The principles and guidelines outline strategies that faculty can use to build a flexible, learning environment to scaffold and differentiate learning for a broad range of students.

Importantly, faculty who embrace the principles would deliberately develop curricula, implement instruction, and assess learning, so *each* student has equal access to learning (CAST, 2011).

Learning is contextualized in regular courses thus leveraging student learning without having to remove the learner from the classroom for remediation. Table 1 provides a summary of the principles and guidelines.

Table 1

Principles and Guidelines of Universal Design for Learning (CAST, 2011)

Principles and Guidelines	Descriptors
Principle I: Provide Multiple Means of Representation	Provide content and materials in a variety of formats, including physical, symbolic, and linguistic examples.
Guideline 1: Provide options for perception	Offer content and materials in multiple, flexible formats (audio, visual, tactile).
Guideline 2: Provide options for language, mathematical expressions, or symbols	Clarify language, mathematical expressions, or symbols and scaffold understanding with alternative or multiple representations.
Guideline 3: Provide options for comprehension	Build on or supply background knowledge, emphasize important ideas, and support cognitive and metacognitive strategies.
Principle II: Provide Multiple Means of Action and Expression	Provide multiple and varied opportunities for students to demonstrate their knowledge and skills.
Guideline 4: Provide options for physical action	Use varied and alternative ways for students to physically interact with instructional materials or complete instructional tasks.
Guideline 5: Provide options for expression and communication	Offer multiple media, tools, opportunities, and formats for students to demonstrate their knowledge and understanding of a subject.
Guideline 6: Provide options for executive functions	Support students' goal setting, planning, information and resource management, and progress monitoring.
Principle III: Provide Multiple Means of Engagement	Provide students with multiple and varied opportunities to develop and sustain interest in a topic, as well as monitor their skill and knowledge development.
Guideline 7: Provide options for recruiting interest	Present relevant learning activities with authentic opportunities for students to make choices, while reducing threats and negative distractions.
Guideline 8: Provide options for sustaining effort and persistence	Build in reminders, vary the level of task demand, and foster collaboration among students.
Guideline 9: Provide options for self-regulation	Foster self-reflection present opportunities for students to monitor their knowledge and skill development.

Findings from related research show that aspects of universal design have been applied to learning and instruction in K-12 settings with good success (Acrey, Johnstone, & Milligan, 2005; Elder-Hinshaw, R., Manset-Williamson, Nelson, & Dunn, 2006; Kortering, McClannon, & Braziel, 2008; Lee, Wehmeyer, Soukup, & Palmer, 2010; Rao, Dowrick, Yuen, & Boisvert, 2009; Savi, Wilhelminia, & Rowland, 2008). Teachers engaged in the application of various principles of universal design have reported improved student behavior and engagement (Acrey et al., 2005; Rao et al., 2009). Additionally, both students with and without disabilities experienced improvements in their learning (Kortering et al., 2008; Rao et al., 2009; Savi et al., 2008).

In postsecondary settings, researchers have trained preservice K-12 teachers to apply the principles of universal design in their classrooms with fidelity (Evans, Williams, King, & Metcalf, 2010; Spooner, Baker, Harris, Ahlgrim-Dezell, & Browder, 2007). Participants in these types of studies have been found to have positive learning outcomes themselves (Parker, Robinson, & Hannafin, 2008). Likewise, a study that examined training for faculty in the application of universal design in postsecondary education yielded positive responses on the part of participants (Izzo et al., 2008). The faculty reported that they found the training valuable and felt more comfortable using these strategies after professional development. In another study in which faculty had been trained in the use of universal design for learning, the students reported a significant increase in the use the strategies by their instructors (Schelly, Davies, & Spooner, 2011). Related research has also shown that when faculty incorporated principles of universal design in their teaching, students felt welcomed, benefited academically from the approach, and

indicated that the assessment strategies were a valuable component of their learning (Rao & Tanners, 2011; Simoncelli & Hinson, 2008).

In sum, the research suggests that students with diverse learning needs could benefit from curriculum, instruction, and assessments that were universally designed. Faculty who are trained in these strategies are more apt to implement them in their classrooms. Yet, the success of such strategies is heavily tied to faculty members' ability "to effectively implement them", and faculty members are not typically "trained in pedagogy, curriculum, and assessment in ways that would enable them to be more effective with their students, particularly with those who are academically under-prepared" (Tinto, 2011, p. 5). The project described in the remainder of this paper is a first step toward addressing this issue.

Next, the journey begins with a description of the college in which the project was enacted is presented. Then, an explanation of the project, which was a field test of a research-developed faculty development series on embedding Universal Design for Learning (CAST, 2011) into curriculum, instruction, and assessment, is provided. Highlights from and one participant's reflections on translating knowledge and skills gained through the training are offered as examples of how professional development in universal design can affect faculty practice. The paper ends with a brief discussion of the next leg of the journey.

Goodwin College

Goodwin College is a private not-for-profit 4-year college that offers primarily associates degrees and certificate programs. It is located in a small city adjacent to Hartford, Connecticut's capital. The college has an open-access enrollment policy, which mirrors that of the state's community college system. In the fall of 2012, the total student enrollment was 3,317. Of those students, 85% were part-time and 15% were full time. Concerning gender, 83% were female and

17% were male. The racial and ethnic makeup of the student population is 53% White, 22% Black or African American, 19% Hispanic, 2% Asian, with the remaining 3% made up of students who identified as being of two or more races. More than half of Goodwin's students are the first in their families to attend college, and 65% are 25 years of age or older. As for financial aid, 93% of students receive some sort of assistance. The retention of first-time students who were seeking bachelor's degrees in the fall of 2011 and who returned to the institution to continue their studies in the fall of 2012 was 57% for full-time students and 49% for part-time students.

Project Description

The primary goal of this project was to develop and field test a faculty development workshop-series on universal design for learning in postsecondary education. It was supported by a mini-grant secured by the lead author, Diana, through her college and was approved by the University's Human Subjects Committee. The long-term aim is to use the products in future research and faculty development initiatives.

The opportunity to pilot-test materials at Goodwin College emerged from faculty members' interest in addressing the diverse academic needs of their student population. During the 2012 summer and fall semesters, Goodwin College full-time faculty had attended two workshops focused on students with disabilities. Following these workshops, some faculty expressed interest in pursuing more systematic and intensive professional development related to universal design for learning and meeting the academic needs of the broader student population (V. Navaroli, personal communication November 12, 2012).

Diana has an ongoing professional relationship with several Goodwin College faculty members who are either current or former students in the University of Hartford's Doctoral

Program in Educational Leadership. They are aware of her interest in making learning accessible to all students, and some have been involved in related projects. It was through this connection that Diana was invited to give a 2-hour introductory workshop on the topic of universal design in education during Goodwin College's Community Day. Nearly all of Goodwin's full-time faculty members attended. MaryJo assisted with the presentation.

The introductory workshop was used as an opportunity to recruit volunteers for the pilot test. Recruitment materials made clear that this was a field test and the various commitments that individuals would make by volunteering to participate. Seven individuals volunteered to take part in the entire faculty development series, which consisted of four 2-hour workshops held on alternate weeks. Six of the faculty worked in Goodwin's Health and Natural Sciences Department and one worked teaching first year experiences courses. The workshops were held on the Goodwin college campus. The dates and times for the workshops were set to meet the needs of both the participants and the presenters. The series was free, snacks were provided, and each participant received four books valued at about \$200.00. Not all participants attended every session.

Diana and MaryJo developed the workshop agendas and materials collaboratively. We relied heavily on what is publically available on the CAST website, supplementing with other resources. Dropbox, a file hosting service, was used to share materials with participants. Folders were created for each session, and agendas, PowerPoint slides, relevant journal articles, and other materials were uploaded there. The development of the workshop series was informed by the work of researchers that have identified important features for effective professional development that are associated with improved student outcomes in K-12 settings (Trivette, Dunst, Hamby, & O'Herin, 2009; Wei, Darling-Hammond, Andree, Richardson, & Orphanos;

2009; Wei, Darling-Hammond, & Adamson, 2010). Of note, professional development is most effective when it is focused on curricular and instructional strategies that are needed to teach all students effectively. This includes helping participants identify a clear and direct link between their classroom work and professional learning. The learning experience should be sustained and intensive over time (i.e., 11 hours to 40 hours), and include follow-up sessions or activities that explicitly connect initial and on-going training.

The learning experience should also be designed to actively engage participants in activities that are meaningful for them and incorporate what is known about adults as learners (Knowles, Holton, & Swanson, 2012). Specifically, Knowles' (1978, 1980, 1984) adult learner model informed the design of the workshop series. Two ideas are fundamental to the approach—the learner as self-directed and the teacher as *facilitator*. Further, the learning experience is most effective when individuals understand why they need to know something, connect new learning to and draw on their personal experiences, recognize a current need for the new learning, and can identify their own learning goals and objectives suited to their particular needs and learning style (Knowles 1978, 1980, 1984; Knowles et al., 2012).

Before the workshop series began, participants completed a research-developed Internet-based survey that contained 12 items designed to gather their perceptions of themselves as learners and 9 items designed to gather their reports of their level of use of the Universal Design for Learning guidelines (CAST, 2011) in their classrooms. Diana and MaryJo used the information to help them design the training. The survey items have been used in other research projects. A copy of the survey is in Appendix A.

The first session included an introduction to the series, and the main topic was how the brain works and the neurological science behind universal design for learning. A colleague who

has particular expertise in this area presented the content. The second through fourth sessions each focused on one of the three principles Universal Design for Learning. MaryJo was primarily responsible for delivering the second and third workshop. Diana delivered the fourth workshop.

The workshop structure was similar for the second through fourth sessions. Six of the participants had attended the introductory workshop so they were somewhat familiar with the Universal Design for Learning principles (CAST, 2011). Each session began with a facilitated discussion of a principle and related guidelines. Participants were asked to reflect on ways they might be currently applying the principle and ways they might be able to incorporate related guidelines in their teaching. The workshop presenters modeled application of the principles throughout the sessions. One example is a learner self-regulation sheet that participants were asked to complete themselves (Appendix B). It was used as method for demonstrating Guideline 6: Provided Options for Executive Function, which is focused on supporting students' goal setting, planning, information and resource management, and progress monitoring.

After the first through third workshops, attendees were expected to engage in take-home follow-up activities, which consisted of suggested readings and selecting a lesson to be modified in during the next session. Session presenters assisted with lesson modifications, asked the group to brainstorm ideas, and attendees presented their ideas to the group. A sample agenda is in Appendix C. At the end of each session, attendees completed a workshop evaluation form (Appendix D). Table-A-1 in Appendix E contains a summary of the results. Participants also completed an overall evaluation for the series and the responses to the open-ended questions (See Table A-2 in the appendices.). Generally, the workshops were well received.

Deanne's Perspectives

Deanne is an occupational therapist and the program director for Goodwin's Occupational Therapy Assistant Program. While in attendance at the introductory workshop, she approached Diana and commented on how the philosophy of universal design was not new to her because it was foundational to her disciplinary training. The idea of having an opportunity to think about it as it applies to the design of curriculum, implementation of instruction, and assessment of students' learning was energizing. She signed up for the field test of workshop series on the spot.

Deanne attended all four sessions and played a vital role in brainstorming with others about how to apply the principles of Universal Design for Learning (CAST, 2011) to their teaching. She and another workshop attendee, Joan, who is also an occupational therapy instructor, collaborated during all the activities. They engaged actively in the opportunities to modify lessons and began working on reformatting one of their classes, OTA 200 - Occupational Therapy Assistant and Adult Populations (4 credits), during the workshops. They continued to modify this course throughout the summer session offering. In OTA 200, students study the principles and practices of occupational therapy for adults with physical and psychosocial disabilities. The instructors co-taught the course, which has a practice lab component. The highlights and reflections about the course, which are presented next, are in Deanne's words.

The journey begins with a snapshot of the course before the revision is provided. As can be seen in Figure 1, the course format was a typical lecture class with little active learning or opportunities to work collaboratively.

OTA 200 Before the Universal Design Workshop Series

- Used Blackboard with PowerPoint's posted.
- Students provided with learning objectives in syllabi and assignments and readings.
- Quizzes and midterm/final exams were all multiple choice and short answer.
- Readings never required answering questions at end of chapter or follow up except that they related to the class content.
- Students sat through lecture that was review of the PowerPoint posted online, essentially with clinical vignettes discussed as part of class. This was difficult for some students because they couldn't connect vignettes with PowerPoint or content.
- Two semesters of students' evaluations of course were 2/5 - 3/5. Student evaluation comments for this class and from student evaluation while on academic fieldwork indicated a need for more hands on training activities and visual representation of treatment interventions and diagnoses.

Figure 1. Highlights of OTA 200 before the course was revised using the principles of Universal Design for Learning (CAST, 2011).

Figures 2 and 3 contain Deanne's reflections on the first- and second-class sessions of the revised course. They provide insight into the course transformation that was taking place. These highlights demonstrate how the instructors were engaging students actively in creating a flexible learning environment, one that was respectful of both student and faculty needs. By reflecting in action with students about their new course design, the instructors made clear what they were attempting to do and how that connected to the students' professional practice.

Appendix F contains additional highlights from and reflections on the entire semester organized by universal design principles, as the instructors' understood them. These notes were recorded at the beginning and end of the summer semester. As with the samples in Figure 2 and 3, they display the multiple ways in which the instructors embraced the principles and embedded them in their teaching to scaffold and differentiate instruction to address the diverse learning needs of the students in OTA 200.

First Class Meeting Highlights From Revised OTA 200 Course

- Reviewed partial syllabus set up for first quarter of the course, with discussion of how the remainder of the syllabus would be formatted based on student reports and assessment at week 3-4. Explained this was being done to assure the syllabus reflected needs of all learners in class and that students take part in the process.
- Discussed self-regulation sheets and use.
- Discussed what universal design is and its use in OTA to modify the environment, as well as universal design for learning and its use in education and the cross over between how we practice and how we educate.
- Reviewed class objectives and discussed how objectives related to curriculum design and accreditation standards and ultimately to taking the certification exam.
- Provided a visual of the format of the class for the night on large paper on front wall.
- Established class norms (students and instructors) and posted them. Remained in class for entire semester. They included: Respectful of each other, do not negatively discuss the current class in other OTA courses, bring concerns to class/instructor (demonstrates professional behavior), be on time, break at 6:45 to allow students to make café before 7:00 pm close to get food/drink, timely feedback (quizzes), no cell phone use, be 100% in class when you are there.

Figure 2. Highlights from and reflections on the first class meeting of revised course.

Second Class Meeting Highlights From Revised OTA 200 Course

- Handed back self-regulation feedback sheet-black ink is student comments yellow highlight or red is instructor (see 2 attached examples); also posted it in on blackboard under same week completed. Continued to do this weekly. This week we also reviewed the comments with the entire class. We have found that it also helps the instructor to know what students are understanding or obtaining in class for information!
- Provided Quiz and allowed students to ask for clarification if they did not understand the question. Many ESL students, so it is important (last instructor did not allow this).
- Reviewed answers to quiz after everyone had handed it in (immediate feedback).
- Lectured for 30-40 minutes, incorporated brain gym activities in class half way in and discussed why, then completed lecture. Discussed how Brain Gym can be incorporated into K-12 classroom and can be a recommendation provided by occupational therapy to teachers.
- Making direct connection between lecture and implementation (addressing all three principles).
- 30-45 minutes of lab activities (students in groups of 3-4 and stations with 2 instructors moving through the stations). Students utilized prior knowledge and other students in groups who had experiences with the task. All hands on and experiential.
- Ended class with review of content covered, review of assignments for upcoming week/modified Blackboard at same time to reflect any changes/answered any questions. Review included verbal and visual representation with changes to Blackboard immediate.

Figure 3. Highlights from and reflections on the second class meeting of revised course.

The student comments in Figures 4 and 5 are shared as evidence that students were appreciative of instructors' efforts at engaging them in the course design and the new approach to teaching and learning. The figures also depict the specific approach taken to help students regulate their own learning and ask questions. The comments suggest that students felt empowered by the course design to ask questions and were exercising their choice to affect their own learning on a weekly basis.

Week 1: Self-Regulation Sheets
Sample Student Comments and Instructor Feedback (<i>Italics</i>)
<p>What is phys dis? <i>Phys Dis is actually short (phys dys...for physical dysfunction.</i></p>
<p>Could you describe evidence based practice? <i>Reading Pedretti Chapter 4- Evidence Based Practice. Essentially it is research that supports, evidence that supports practice of occupational therapy treatment interventions, assessments, etc. Insurance companies, consumers, etc. want to know why they should pay for an intervention...is there evidence to support that it will work?!</i></p>
<p>Can the instructor change the rules? <i>Not unless agreed upon by all parties, or if there are extenuating circumstances.</i></p>
<p>You teachers said that a late assignment from a missed class needs to be handed in within the week...what about do over assignment by the teacher? <i>We will give you a deadline for do overs! review the policy for missed classes for the details on dates for assignments due the night of a class you might miss. If there is an additional expectation or assignment made between you and the instructor the due date will be defined accordingly.</i></p>
<p>Do you teachers feel ok teaching together or feel awkward? <i>LOVE IT!</i></p>
<p>I like the exercise, it's fun and wakes people up.... <i>See you tube and internet...read about Brain GYM</i></p>
<p>Who decides where a client goes from the hospital and where to send them? <i>Case manager, interdisciplinary team, client, caregivers, etc.</i></p>
<p>What types of resources do students bring to their fieldworks... <i>Great question to ask at your interview! And for you to assess ongoing what you need...books notes, etc</i></p>
<p>I'm enjoying the new structure and looking forward to the semester. <i>Great continue to give feedback</i></p>
<p>For a therapeutic relationship- a good listener is just as important as someone who talks... <i>ABSOLUTELY...SOMETIMES MORE IMPORTANT</i></p>
<p>I enjoy that the learning outcomes are listed and were discussed in class. The Medicare aspect is confusing to me. When do we learn this? Self taught? (will be clarified by Lisa) <i>And in OTA 203...and in your fieldwork and then again...in your job!!</i></p>
<p>Show visual Great visuals on seeing everything working together</p>

Week 1: Self-Regulation Sheets**Sample Student Comments and Instructor Feedback (*Italics*)**

Worry about reimbursement and Medicare/insurance qualifications. *Understanding the Medicare and insurance issues is not the priority of your learning right now. It will be important as you work but changes frequently, is based on the setting you are in and will be managed by your supervisor or facility.*

Figure 4. Sample student and faculty comments from self-regulation sheets after the first class meeting.

Week 2: Self-Regulation Sheets**Sample Student Comments and Instructor Feedback (*Italics*)**

Good Practice with lifting

Be aware that these techniques require practice and you will need to teach patients/family members/care givers the proper way to assist the person in need. This is FW learning

Today's class was awesome.

Can you guys continue to teach like that; the visual showing of what you are talking about so we can see it is just great. *Our style of teaching will continue and we look forward to your ongoing in-put. We are trying to encourage you to experience what you are learning and still learn the content of the lectures; the book is a wonderful resource. You need to know the frames of reference you are working with and understand why your task will address the medical limits of the patient.*

VERY IMPORTANT!!

Never knew how much body mechanics can affect your health. *Remember that you must protect yourself as well as the patient when doing the transfer and assisting a person with moving.*

As a CNA health care professionals teach us to always use your legs instead of your back

For the lab mechanics – I didn't know what RW means and found out it was rolling walker.

Great feedback about the use of the RW abbreviation. We need reminders to stay on top of the language used when teaching....you will need to do this when documenting. Refer to the abbreviation list you received in OTA 100

Also we worked great as a group!!!!

Had questions and we all helped each other out... answering them very helpful.

Height of walker height of commodes, bed.....

Great to remember this is your responsibility at all times. If you notice there is an issue with the height of a walker/cane/commode/bed/wheelchair seat, it is a skilled intervention to adapt it immediately and to assess you completed this task.

Week 2: Self-Regulation Sheets**Sample Student Comments and Instructor Feedback (*Italics*)**

Loved class tonight

Quiz was disappointing to me; didn't do well

Great hands on with transfers *The clinical is a place to master the techniques as you move and transfer the patients with different diagnoses; it is your responsibility to know the principles and safe strategies, when to do what type of transfer, how to grade the level of assistance.*

What makes a person's hand completely bend almost flat to the wrist?

Is it because the person's wrist is not being stretched? *Contracture due to increased tone...p. 872-873*

Don't assume walker is at the right height *At times staff move devices and patient are given a walker that was fitted for another patient; in the ideal world the devices should be labeled for the person for whom they are assigned. As an OTA you can always consult with the PT staff on the best device to use for a patient as you are doing functional tasks. If people are at a point of transition to a new device it is often helpful to have OT practice using the device when performing ADL. Pedretti Ch 11*

Enjoy learning about Body Mechanics. I need to remember using proper mechanics outside of work too!!! *Refer to Ch 10 in Pedretti. Discusses different types of equipment and how OT needs to assess and plan the transfers on and off the equipment in a safe manner.*

Is kyphosis from old age? Can it be prevented? *Pedretti pg 892 discusses posture in the Spinal cord injury; review the information from Ch 41 about the spinal anatomy. Trunk control pg 477-478.*

I need more time with transfers. I need to get more comfortable with my positioning. *Everyone does don't sweat it! Know the levels of assistance and methods!*

Week 2: Self-Regulation Sheets**Sample Student Comments and Instructor Feedback (*Italics*)**

The more I look into praxis the more confused I get about it. I know it has to do with motor skills. *This will be addressed in pediatrics. Its frontal lobe, idea, initiate a plan, sequence the plan, problem solve when you run into difficulty, adapt and change to achieve the task. This is praxis.*

Just taking the first aid/CPR many times our instructor state to only use hand sanitizer when you can't wash your hands and once you get to soap and water then wash your hands (even if you used hand sanitizer) *to clarifywe agree that once you are able to access soap and water you will benefit from using it especially to remove soiling of the area. For many infection control doctors they report that the use of the hand sanitizer is appropriate to use for management of hand cleaning. Refer to Pedretti pg 145-150.*

I am torn from doing FW; there was a lot of cone stacking activities and being creative without stepping on toes of the rehab therapists..... *You bring up a valid comment. We are not saying that the use of cones is bad or contraindicated. Unfortunately it is a tool that can be used too frequently, without clinical justification or without connection to a specific goal for the patient. Integrating the cones in neuro rehab is appropriate. Knowing why you are using the cones, being creative with how they are used and always ensure the patient understands what you are using them for (correlate to the functional task you are working on).*

Stereognosis – proprioceptive info and touch info to identify item without vision (pg 584 pedretti – “I got \$20 in my pocket”- *see you will never forget that!*

Good point – what can we do to help overall function of the client?

Learned how sacral sitting is compensatory – examples very helpful *As related to positioning Pedretti pg 254*

Also how to move properly using real life examples like picking up a pen or fixing a wheelchair
I had a great time with the lab!!! I learned a lot and back positioning was a huge component.

So-me brace???? *SOMI brace- stands for sternal, occipital, mandibular, immobilizer brace. There are many styles of back braces that clients are issued depending on their injury/surgical procedure. Ch 41 Pedretti discusses many low back injury issues addressed by OT. It is important to follow MD orders as there are many different protocols that we must follow. The evaluation should outline precautions to follow and instructions as to when a brace should be used.*

AJOT American Journal of OT Nov/Dec 2008 includes the practice framework article

Lab was very helpful!!!!

Role of the OT is to help the patient “do” for themselves promoting independence!!!

Week 2: Self-Regulation Sheets**Sample Student Comments and Instructor Feedback (*Italics*)**

ALS??? *Pedretti pg 918-921. Amyotrophic lateral sclerosis more to come*

If they are sitting in posterior pelvic tilt do you make sure to write that it is how they sit so it can be an improvement in time potentially? *Most assessment tools have a section on posture so this might be where the OT makes the assessment of sitting posture. It might be that the posterior pelvic tilt is not seen during the eval process since patients might not*

Straighten up back; future will be better

Functional ADL's? or for a reason?

Figure 5. Sample student and faculty comments from self-regulation sheets after the second class meeting.

The Next Leg in the Journey

Goodwin College's professional development on students with disabilities had increased faculty members' awareness of why it would be important to have additional pedagogical knowledge and skills that would help them support all students' who are academically underprepared for college-level work. Further, Goodwin's administration acknowledged this need to know and decided to offer a corresponding professional development experience to address this self-identified learning need. This provided Diana and MaryJo with an opportunity to field-test a research-developed faculty development series on embedding Universal Design for Learning (CAST, 2011) into curriculum, instruction, and assessment.

Diana is working with Hartford Public Schools and area community colleges to provide similar professional development opportunities. Teams of community college faculty and Hartford Public School personnel have been invited to a free, daylong workshop on the application of Universal Design for Learning in community college and high school classrooms. An individual from CAST will conduct the training. This workshop will provide participants with an introduction to the principles of universal design. Following the workshop, the teams will have an opportunity to attend a series of follow-up hands-on professional development

opportunities that will focus on issues of aligning curriculum and designing lessons and materials that are accessible to all students. The materials that were developed for the field test will be refined for use in this next professional development series. The intended outcome is to have a cadre that has the knowledge and skills to assist others with embedding learning supports in regular coursework. As for Deanne, her goal “is to [not only] educate K-12 and post secondary educators about the value and benefit of UDL, but also [show them] how to actually implement” the principles in their classrooms.

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Appendix A
Pre-Post Workshop Internet-Based Survey

Section I: How do I understand myself as a learner? (© Fitzgerald & LaRocco, 2012)

This section contains 12 statements about your understanding of yourself as a learner. Read each statement carefully. For each, please select the response choice that best describes your level of agreement with the statement.

1. I learn best when I know why something is important for me to know or be able to do.
 - Disagree Very Strongly
 - Disagree Strongly
 - Disagree
 - Agree
 - Agree Strongly
 - Agree Very Strongly
2. I learn best when I am aware of the purpose of the learning (goals or objectives).
 - Disagree Very Strongly
 - Disagree Strongly
 - Disagree
 - Agree
 - Agree Strongly
 - Agree Very Strongly
3. I learn best when I have some involvement in planning my learning experience.
 - Disagree Very Strongly
 - Disagree Strongly
 - Disagree
 - Agree
 - Agree Strongly
 - Agree Very Strongly
4. I learn best when I have some control (choice) over the way I experience learning.
 - Disagree Very Strongly
 - Disagree Strongly
 - Disagree
 - Agree
 - Agree Strongly
 - Agree Very Strongly
5. I learn best when I can connect the learning topic to my prior knowledge.
 - Disagree Very Strongly
 - Disagree Strongly
 - Disagree
 - Agree
 - Agree Strongly
 - Agree Very Strongly

6. I learn best when I can share my prior knowledge or resources to enhance the learning experience.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

7. I learn best when the learning is connected to my day-to-day work and current issues.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

8. I learn best when I can see the immediate application of new learning to my current work.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

9. I learn best when I am able to question, inquire, or problem solve during a learning experience.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

10. I learn best when I have opportunities to assess or monitor my own learning.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

11. I learn best when I can select learning experiences that meet my needs.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly

- Agree Very Strongly

12. I learn best when the learning experience supports my professional growth.

- Disagree Very Strongly
- Disagree Strongly
- Disagree
- Agree
- Agree Strongly
- Agree Very Strongly

Section II: What is your level of use of the UDL guidelines in your classes...

(© Wilken, 2011)

Universal design for learning (UDL) is a proactive approach for creating instructional goals, methods, materials, and assessments that work for everyone. Underlying UDL is the concept that students learn best when they are given multiple opportunities and a variety of methods to access and apply the content of the learning. There are three broad UDL principles, and each has three guidelines for application.

For each of the following items, please select the response that best describes your level of use of the listed UDL guideline in your classes.

Principle 1: Representation Guidelines

Representation (Recognition): Use multiple and flexible means to present what is to be learned, so all students can access the content of the curriculum.

13. RG1. Perception: Offer course content and materials in multiple, flexible formats (audio, visual, tactile).

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes.
- I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

14. RG2. Language and Symbols: Clarify language, mathematical expressions, or symbols and scaffold understanding with alternative or multiple representations.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

15. RG3. Comprehension: Build on or supply background knowledge, emphasize important ideas, and support cognitive and metacognitive strategies

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

Principle 2: Action and Expression Guidelines

Action and Expression (Strategic): Offer multiple and flexible means for how students demonstrate what has been learned, so all students can show what they know and are able to do.

16. AG1. Physical Action: Use varied and alternative ways for students to physically interact with instructional materials or complete instructional tasks.

- I really don't know much about this guideline, or I am not sure how it would be helpful for my classes.
- I have some information about this guideline, and I am considering its usefulness for my classes.
- I know enough about this guideline, and I am preparing to use it in my classes.
- I use this guideline in my classes, and I am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought, and I use it fairly routinely for my classes.
- I use this guideline regularly, and I am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I continue to use this guideline, and I am actively looking for other approaches to replace it that will better meet the objectives for my classes.

17. AG2. Expression and Communication: Use multiple media, tools, formats, opportunities, and graduated level of support to build fluencies so students can express their knowledge and understanding of a subject.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

18. AG3. Executive Function: Support students' goal setting, planning, resources management, and progress monitoring.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

Principle 3: Engagement Guidelines

Engagement (Affective): Use multiple and flexible means to help students understand why the learning is important and engage them in what is to be learned, so students' interests are tapped.

19. EG1. Recruiting Interest: Present relevant learning activities with authentic opportunities for students to make choices, while reducing threats and negative distractions.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes.
- I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

20. EG2. Sustaining Effort: Build in reminders, vary the level of task demand, and foster collaboration among students.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

21. EG3. Self-Regulation: Foster self-reflection and present opportunities for students to monitor their knowledge and skill development.

- I really don't know much about this guideline and am not sure how it would be helpful for my classes.
- I have some information about this guideline and am considering its usefulness for my classes.
- I know enough about this guideline that I am preparing to use it in my classes.
- I use this guideline in my classes and am primarily focused on learning how to apply it effectively in my classes. I use this guideline without much conscious thought and apply it fairly routinely for my classes.
- I use this guideline regularly and am trying out varied ways of applying it to better meet the objectives for my classes.
- I am collaborating with colleagues to develop varied, flexible ways of applying the guideline to better meet common objectives for our classes.
- I have been using this guideline for some time and am looking for other approaches to replace it that will better meet the objectives for my classes.

**Appendix B
Self-Regulation Sheet**

**Feedback: The hinge that joins teaching and learning.
(Pollock, 2012)**

Effort: 1 = I gave very little effort. _____ 4 = I pushed myself to exceed what was required.
Understanding: 1 = I have no idea. _____ 4 = I could teach someone else.

Date	Class Objectives/Assignments/Activities	Effort								Understanding							
		Pre				During				Pre				Post			
	Readings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Lesson to modify	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Modified lesson	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Presented lesson	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Participated in discussion	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Appendix C

Universal Design for Learning Professional Development Workshop Series Session 4: UDL Principle III

AGENDA

Purpose: Gain an understanding of UDL Principle III: Strategic Engagement

Objectives:

1. Participants will identify Principle III guidelines currently in use.
2. Participants will select one Principle III guideline that they currently do not use and select an associated checkpoint that they would like to apply in their teaching.
3. Participants will modify select teaching material (e.g., existing lesson, activity, or other curricular material) to align with the chosen guideline and checkpoint.
4. Participants will present the guideline, checkpoint, and modification made, and explain the rationale.

Time frames and activities:

12:30 pm - 12:35 pm	Review session objectives and agenda
12:35 pm - 1:00 pm	Review Principle III and discuss guidelines currently in use
1:00 pm - 1:30 pm	Apply one Principle III guideline and the corresponding checkpoint to select teaching material and make relevant modifications
1:30 pm - 2:25 pm	Present modification and the rationale
2:25 pm - 2:30 pm	Complete session evaluation and overall workshop evaluation

Appendix D Workshop Evaluation Form

Workshop #:
Presenter:
1. What did you learn in this workshop?
2. How will you use it?
3. What will you use in your classroom?
4. Comments / Suggestions / Questions

Please rate the following aspects of the workshop.

5. Content of the Presentation	5	4	3	2	1
6. Quality of the Speaker(s)	5	4	3	2	1
7. Understanding of the Material	5	4	3	2	1
8. Usefulness in the Classroom	5	4	3	2	1
9. Interest in the Topic(s)	5	4	3	2	1
10. Likelihood of Implementing	5	4	3	2	1

Workshop Series: Overall Evaluation

The Learning Experience (© Fitzgerald & LaRocco, 2012)

For each statement, please select the response choice that best describes the frequency with which you experienced the practice.

1. Overall, my learning experience in this workshop series had real world learning objectives.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

2. Overall, my learning experience in this workshop series provided me with opportunities to build upon my real world experiences.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

3. Overall, my learning experience in this workshop series helped me make connections to previous learning.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

4. Overall, my learning experience in this workshop series helped me connect the new learning to my day-to-day instructional needs.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

5. Overall, my learning experience in this workshop series provided me with opportunities to gain additional experiences in an area relevant to my work.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

6. Overall, my learning experience in this workshop series provided me with opportunities for peer collaboration.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

Overall Evaluation (continued)

7. Overall, my learning experience in this workshop series provided me with opportunities to evaluate my learning.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

8. Overall, my learning experience in this workshop series motivated me to learn by having immediate relevance to my day-to-day instructional needs.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

9. Overall, my learning experience in this workshop series provided me with opportunities for increased professional growth.

6	5	4	3	2	1
Very Frequently	Frequently	Occasionally	Rarely	Very Rarely	Never

10. What was your most memorable learning in this workshop series?

11. How will you use it?

12. Comments / Suggestions / Questions

Appendix E
Summary of Workshop Evaluations

Table A-1
Summary of Workshop 1–4 Evaluations

Workshop/Item	Rating				
	5	4	3	2	1
Workshop 1: Neurological Basis of UDL (<i>n</i> = 6)					
Content of the Presentation	6				
Quality of the Speaker(s)	6				
Understanding of the Material	6				
Usefulness in the Classroom	6				
Interest in the Topic(s)	6				
Likelihood of Implementing	6				
Workshop 2: Representation (<i>n</i> = 7)					
Content of the Presentation	5	1	1		
Quality of the Speaker(s)	5	2			
Understanding of the Material	5	2			
Usefulness in the Classroom	4	2	1		
Interest in the Topic(s)	6	1			
Likelihood of Implementing	4	3			
Workshop 3: Action and Expression (<i>n</i> = 6)					
Content of the Presentation	4	2			
Quality of the Speaker(s)	5	1			
Understanding of the Material	5	1			
Usefulness in the Classroom	6				
Interest in the Topic(s)	5		1		
Likelihood of Implementing	5	4			
Workshop 4: Strategic Engagement (<i>n</i> = 4)					
Content of the Presentation	4				
Quality of the Speaker(s)	4				
Understanding of the Material	3	1			
Usefulness in the Classroom	3		1		
Interest in the Topic(s)	4				
Likelihood of Implementing	2	2			

Table A-2

Workshop Series: Overall Evaluation (n = 4)

Overall, my learning experience in this workshop series . . .	VF	F	O	R	VR	N
Had real world learning objectives	2	2				
Had opportunities to build upon my real world experiences	3		1			
Helped me make connections to previous learning	2	2				
Helped me connect the new learning to my day-to-day instructional needs	3	1				
Provided me with opportunities to gain additional experiences in an area relevant to my work	3	1				
Provided me with opportunities for peer collaboration	2	2				
Provided me with opportunities to evaluate my learning	3	1				
Motivated me to learn by having immediate relevance to my day-to-day instructional needs	3	1				
Provided me with opportunities for increased professional growth	3	1				

Note: VF = Very Frequently, F = Frequently, O = Occasionally, VR = Very Rarely, N = Never

Open-Ended Questions	Verbatim Responses
What was your most memorable learning in this workshop series?	<p>“The collaboration of different ideas with the other participants”</p> <p>“Sharing the different types/methods that can be applied to the classroom”</p> <p>“All of it...As a new instructor it gives me confidence to continue this journey”</p> <p>“Validates my current process of instruction and how to develop it more objectively”</p>
How will you use it?	<p>“As a springboard to other conversations at department meetings”</p> <p>“Will be incorporating at least one guideline into lectures or labs”</p> <p>“Increase my expectations of students, define responsibility of student in learning curve”</p>
Comments/Suggestions	<p>“In each syllabi/class development faculty training”</p> <p>“Thank you for sharing your energy and knowledge”</p> <p>“Great course. Need to offer to all faculty in professional development.”</p>

Appendix F

Highlights and Reflections on the Application of Universal Design to OTA 200

Deanne organized highlights from and reflections on the entire semester by universal design principles and as she understood them. These notes were recorded at the beginning and end of the summer semester.

Principle I: Provide Multiple Means of Representation

Beginning

- Initial syllabi developed by faculty; remainder of 11 weeks the class assisted with development.
- Using YouTube to provide actual client treatment sessions video; also used Khan Academy for content (i.e., to provide auditory and visual access), and posted materials to Blackboard
- Provided keywords and points written on white board as they come up, so KEY terms for the week's class were visually represented, discussed, and in view for entire class. Also key terms for study purposes for quiz. Emphasizing important ideas.
- Worked in groups and engaged in hands treatment of OT with peers.
- Discussed how last semester's work related to this semester during initial class meeting dialogue and used the white board; bridged the two semesters and how the content learned last semester would be used during the summer semester (this semester).
- A student requested blackboard be updated several days before class, to allow her to print due to work restrictions. The instructor discussed with class her concerns related to this because students look at, print content, and then worry about expectations. The instructor preferred to post the day of class. Students agreed, and one student offered to print off copies for the student who didn't have access weekly.

End

- Worked in groups throughout semester; students provided with hands on items to plan treatment interventions using the real objects used in treatment.
- Professors were able to role-play a treatment intervention. Then, students were asked to do the same given a different case vignette. This occurred in 50% of the 15 weeks of class vs. 25% of previous semester. In addition, faculty let go of quantity on content and focused on quality of learning the material.
- Each student was provided with a diagnosis to research using a specific rubric. Then, students submitted the diagnosis, and they were distributed to all students along with a binder; thus providing a reference guide for each student to then take on fieldwork.
- At the end of the semester each student left the class with a 2" binder with a tangible resource of approximately 30 diagnoses and treatment interventions
- Student evaluations at end of semester provided feedback indicating "what a great resource for fieldwork/internships." Students also remarked that they felt like they learned so much and were able to understand the application of therapy intervention much better.

Principle II Provide Multiple Means for Action and Expression

Beginning

- Loaded, discussed, and reviewed the self-regulation forms to blackboard, which was modeled after one from the workshop.
- Used the self-regulation tool weekly.
- Students also provided instructors with three goals for learning in the class for the semester.
- Student work group activities always started in class for at least 30 minutes to allow faculty to provide feedback and support the executive functions process.
- Provided in class example of an entire assignment with the instructor guidance. Then, students initiated completion of their group assignment after having the model provided.
- Reviewed quizzes the same day they were complete.
- Quizzes returned following week
- Reviewed study questions done independently in class before students them handed in to demonstrate relevance to students.

End

- Allowed students to use their notes and textbooks for the mid-term and final exams. Found essentially the same bell curve for students who would have taken the exam without the supports. Students felt empowered and appreciated the opportunity to use their books. This quote is representative of student feedback

I wanted to provide some input regarding the final exam. I enjoyed the mid-term format. I liked how the exam was broken up by half the class in one room where there were stations and the other room taking the written part. I might be difficult to do the stations in one room because its occupied by the computers, but maybe if extra tables were set up that day it might work.
- Requested student feedback via email to instructors regarding how we should design the Final exam. Allowed one week of responses to assist in development.
- Designed one part of the mid-term and final to have students work together on a case study in small groups and come to consensus on multiple-choice answers. If there was not consensus, they could identify what their reason was in writing for choosing a different answer. Feedback after the course from a student was “you observed how my group spent 20 minutes in disagreement, how could I have handled that differently and moved us along.” I was then able to bring it back to the OTA group Dynamics class and how you manage conflict.
- A second part of the exam was having students identify use of objects provided to them and answer questions. Students had to be told to pick up the object, hold it, try to use it and so on.
- Previous student evaluations of courses have reflected that students never felt they had enough hands on but essentially we found that they needed it to be facilitated. They had always had the opportunity for hands on, but unless its guided or role played, they didn't do it.
- Found that self-regulation tool was used minimally by the end of the semester. In addition, I believe that because there was so much hands on, students felt comfortable and were able to ask some of the self-regulation type questions while working in group activities.

- Found that the three students with identified disabilities did not require accommodations throughout the entire course!

Rubric for Integrated Assessment Project

Due Date: May 27, 2013

- You will be assigned a small group to work with on this project.
- You will be given time in the class May 13 to begin the project structure and establish expectations for completing the assignment as a group.
- Each member will be graded according to the final group document.
- Each group will be responsible for presenting a list of **assessment tools** and **treatment interventions** that are used in the identified topic area assigned.
- **Data can be presented in any format that works** so long as it is comprehensive and clear (**i.e., power point, grid/table, narrative, index cards**). The assignment is to provide a list of all assessments and how each may be used in all possible diagnosis groups.
- Each group will be expected to give a brief presentation about their document with all members involved.

Knowing that the document will be copied it would be ideal to create a format that will be reproduced without much effort to expedite the process of getting the tool available to the class.

After the groups have submitted the assignment, each document will be copied and compiled to create a reference tool for each student in the class (this will be done by the department assistant). The tool will be used throughout the semester as the course progresses for creating treatment plans and establishing problem lists and goals specific to different diagnostic groups.

Grading Criteria:

30 Points

Accuracy in content	5 pts
Comprehensiveness in resources provided	10 pts
Grammar and spelling	5 pts
Clarity in the design of presentation	5 pts
Class presentation regarding the data collected and how to best use the tools they created	5 pts

TOPICS TO BE ASSIGNED:

Range of Motion Perceptual
 Manual Muscle testing Cognitive
 Sensation Visual
 Eating and Swallowing