### Wright College Occupational Therapy Assistant Program Assessment Project Fall 2014/Spring 2015

### WHAT? Describe the purpose of this assessment project.

The Occupational Therapy Assistant (OTA) Program's Assessment Project for Fall 2014/Spring 2015 involves two pursuits to address critical thinking Student Learning Outcomes-(SLO's for both OTA Program and City Colleges of Chicago).

### City College of Chicago - SLO -

1 – Think and read critically so that students can solve problems using appropriate information resources and reasoning processes.

### OTA Program – SLO's –

5 Engage in the safe and effective application of OT process to OT consumers and special populations.

7 Possess the knowledge and skills needed to practice as an Occupational Therapy Assistant in a variety of health care delivery models, systems and settings.

### **The First Pursuit**

- 1. Examine intra and inter disciplinary definitions of "critical thinking" for analysis to unify the concept of critical thinking for OTA Program instruction.
  - A. Research definitions of critical thinking from OTA and other disciplines, engaging in collaborative discussion with OTA program faculty.
  - B. Based on research, create an instructional unit of critical thinking and occupational therapy for student groups.
  - C. Gather data from OTA program students regarding their definition of critical thinking prior to the Level II Fieldwork experience.
  - D. Survey students following Level II Fieldwork experience for definitions of critical thinking (analyze for change), presenting the instructional unit and engaging in a focused discussion of their critical thinking experiences at Fieldwork II.

**Purpose:** The purpose of these efforts at examining critical thinking is to ensure these constructs are congruent in all aspects of the OTA program, beginning with faculty and then progressing to our students' understanding of this vital aspect of professional performance.

### **The Second Pursuit**

2. Evaluation of the effectiveness of the OTA student's critical thinking skills in relation to clinical competence as they enter Fieldwork II (capstone clinical education).

- A. Analysis of grades from exit practicum completers and clinical courses (OTA-215 & 216).
- B. Feedback from students following the completion of two capstone clinical courses (OTA-215 & 216).
- C. Analysis of supplemental and remedial skill building effects on exit practicum performance.

**Purpose:** The purpose of these efforts at examining critical thinking is to validate the exit practicum as a means of "guaranteeing" the program's clinical training partners specific competency levels (critical thinking) for students entering Level II Fieldwork (capstone clinical education). The purpose of gaining feedback from students ensures more qualitative understanding of the use of critical thinking skills from the students' experience and guiding faculty in understanding the supports that may be required to facilitate the development of critical thinking skills.

### WHY?

# Describe your department/program's reasons for taking on this project and the areas of your department/program that are involved.

### The reasons for pursuing these assessment projects involve:

A. Ensuring that the construct of critical thinking is understood by those in charge of disseminating this the information (OTA Program Faculty) and facilitating this understanding among OTA and other interested student groups. – By having a unified understanding of critical thinking, it can be more easily appreciated, clearly recognized in actual performance. As instructors, having a basic definition of critical thinking will also enable us to integrate more formative assignments and lab experiences to reinforce the emergence of this skill. The results of the project's first pursuit may guide us in creating further opportunities to facilitate these skills in the classroom. (The first pursuit for this assessment project 1. A, B, C, D).

The direct measure of success for this portion of the assessment project:

- The completion of a unified definition of critical thinking for the OTA program.
- The creation of a critical thinking instructional unit for the OTA and other interested students.
- OTA student definitions of critical thinking will evidence the components of the OTA program definition.
- B. Ensuring that critical thinking skills are developed in OTA students prior to their performance at clinical sites during their Level II Fieldwork. Since students need these skills with every patient/client they encounter, it is imperative that they leave the academic portion of this program with a strong foundation in using these skills effectively. The exit practicum is an opportunity to evidence these skills at the end of the academic portion of the program. We would expect to see evidence of critical thinking used

during this practicum, enhancing confidence in fieldwork with clinical populations. Results from evaluating the exit practicum and Level II Fieldwork success may assist program faculty in designing other learning experiences in the future to better prepare students in the use of these skills. (The second pursuit for this assessment project – 2. A)

The direct measures of success for this portion of the assessment project:

- All student who successfully complete the exit practicum (using their critical thinking skills to achieve success in this practicum) on their first attempt will achieve an average of 80% or greater on their physical disabilities clinical education course OTA-215-216- (where critical thinking skills are used routinely to solve problems for patients/clients).
- All students who successfully complete the exit practicum following remediation(using their enhanced critical thinking skills to achieve success in this practicum), will achieve an average 80% or greater on their physical disabilities clinical education course OTA-215-216 (where critical thinking skills are used routinely to solve problems for patients/clients).
- C. Examining the students' perspectives of critical thinking for occupational therapy and their impression of growth toward this skill's acquisition following clinical education is another way to evaluate the use of this skill. Following practical, real life experience in the use of critical thinking skills, it is important to recognize the limits or ease in solving complex problems for patients/clients/individuals. We feel it is very important for the students' to recognize this professional growth and welcome their perspectives. From these opinions, we can then also adapt further learning experiences to meet the needs of students better in acquiring critical thinking skills. (The second pursuit for this assessment project –2. B)

The indirect measures of student success in critical thinking related to the practicum:

- Eighty per cent (80%) or more of students who have completed physical disabilities clinical coursework OTA-215 or OTA-216 will rate the exit practicum as a contributor to success of the use of their critical thinking skills and for the success in the clinical education experience where these skills are expected and used with every patient/client interaction.
- D. For those students who require extra time and practice for critical thinking skills to be developed, remediation sessions or supplemental practice sessions are offered. Students are offered bi-monthly support labs on Friday mornings and/or before or after class sessions. Additionally, should students want to pursue individualized support sessions, the instructor's office hours are also available for practice sessions. It is hoped that the students who use these support sessions will find greater ease in using critical thinking skills, and greater confidence in clinical education. (The second pursuit for this assessment project 2. C)

Analysis of students' participation in remediation or supplemental skill building for enhanced critical thinking:

Students who participate in remediation sessions or supplemental skill building sessions for skill development will evidence a score of 80% or greater on both the exit practicum (using their enhanced critical thinking skills to achieve success in this practicum) and the physical disabilities clinical course - OTA-215- 216 - (where critical thinking skills are used routinely to solve problems for patients/clients).

### HOW?

# Describe the participants, methods, and the timeline for this project.

### First Pursuit: Unified Definition of Critical Thinking in Occupational Therapy

- 1. Determine a unified definition of critical thinking for the Occupational Therapy Assistant Program
  - A. Research from the field of Occupational Therapy and other disciplines will be performed to gain a better understanding of this construct.
    - i. This research will be initiated by Adrienne Leyva (OTA Program instructor and assessment coordinator for the program). The timeline will be by midterm of the Fall semester 2014.
    - ii. Sharing this information with OTA Faculty for discussion will be performed during the department meetings just after Fall semester midterms.
  - B. Creation of an instructional unit for critical thinking and occupational therapy for student groups will be implemented as a tool for learning the construct from a professional perspective.
    - i. This instructional unit will be initiated and completed by Adrienne Leyva (OTA Program instructor) before the end of the Fall semester 2014.
    - This instructional unit will be reviewed by OTA Program faculty during department meetings prior to the end of the Fall term, 2014.
    - This instructional unit may be offered to interested student groups by Adrienne Leyva (OTA Program Instructor) prior to the end of Fall term, 2014
  - C. Survey the OTA Program students for their definition of critical thinking in occupational therapy will be obtained by the end of Spring semester 2015, prior to Level II Fieldwork. This survey will be performed by Adrienne Leyva (OTA Program instructor).
  - D. Survey students following Level II Fieldwork experience for definitions of critical thinking (analyze for change), presenting the instructional unit and engaging in a focused discussion of their critical thinking experiences at Fieldwork II will occur at the Level II Fieldwork seminar by Adrienne Leyva (OTA Program instructor).

Second Pursuit: Evaluating OTA Students' Use of Critical Thinking Skills and Facilitation of the Development of These Skills

- A. Analysis of grades from exit practicum completers and clinical courses (OTA-215 & 216) will be performed by Adrienne Leyva at the completion of the Level II Fieldwork experience, January 2015.
- B. Feedback from students following the completion of two capstone clinical courses (OTA-215 & 216). A survey will be developed and distributed to the OTA 3<sup>rd</sup> year students during the Level II Fieldwork seminar. The qualitative information will be analyzed. A report of the findings from the OTA student survey will then be created to examine the students' perception of critical thinking skills used during fieldwork.
- C. Analysis of supplemental and remedial skill building effects on exit practicum performance. Students' participation in supplemental skill building sessions will be tracked and correlated with the performance on the exit practicum. Information from this analysis will assist with planning further supplemental skill building labs in the future. Adrienne Leyva will be collecting, analyzing and reporting the results of this data by the end of Spring semester, 2015.

### WHAT WE FOUND

1. Describe the way in which your department/program will collect results. 2. Provide the results. 3. Describe how these results will be used for improvements.

The OTA Program department is a small department of three individuals who each have identified roles to facilitate the students' learning experiences. Adrienne Leyva is the OTA Program second year instructor and assessment coordinator. All work on this project is the responsibility of this coordinator including the collection of data, analysis of the results and writing of the report summary. In collaboration with the other members of the OTA program faculty, the process will be open for review, the data will be made available for any revision or amendment and the results and recommended improvements will be equitably shared. All assessment project information will be shared with OTA Program faculty during the department meetings and at any other time that is indicated.

### **Results and Implications for Improvements (2. & 3.):**

#### First Pursuit -

**Unified Definition of Critical Thinking in Occupational Therapy** 

**1A. Results**: Research was performed and a unifying definition of critical thinking for OTA was developed. The work of many other disciplines was reviewed and analyzed to examine similar and complimentary components to this definition. The OTA Program faculty engaged in collaborative discussion and review of these

constructs to create a unifying definition for the OTA Program. Program SLO's were reviewed to evidence the places in the curriculum where these skills were emphasized.

### OTA definition of critical thinking: Engaging knowledge and understanding to solve a problem, apply principles, generate goals, evaluate outcomes, and create options.

**Implications for Improvements**: The OTA Program faculty have a clear understanding of critical thinking to facilitate these skills in students of the program. The research process to develop this definition engaged meaningful discussion of this construct and review of program curriculum. This process assisted faculty in identifying the individual class SLO's for critical thinking, identified lecture, assignments, labs and other learning experiences where critical thinking may be discussed and enhanced.

**B. Results:** Based on this research, an instructional unit of critical thinking and occupational therapy for student groups was created, reviewed by program faculty and then offered to student groups (see attached power point presentation). This instructional unit examined the definitions of critical thinking from OT and other disciplines, explained the process and product of critical thinking, examined OT and the OTA program preparation and use of critical thinking skills. A lab component was offered as well to solidify the application of critical thinking in the OTA Program.

**Implications for Improvements**: The creation of the critical thinking instructional unit for OTA and other interested students offers these individuals insight into the construct, how it may be viewed by others and how the process of developing critical thinking skills can occur with OT. Practical application of this skill in the instructional unit offers experience in using these skills to approach complex problems. This instructional unit can now be utilized in OTA-106, Foundations of Occupation. This class is an introduction to OT and highlights many aspects of the profession. Using this instruction formatively may enhance the understanding of critical thinking in the immediate and potential future as these students enter the OTA program.

**C. Results:** OTA Program students were surveyed for their definitions of critical thinking. Answers to two questions were sought to examine the congruence of the students' perceptions with the OTA Program's definition. This survey of information was offered at the end of the didactic portion of this program in Spring semester, 2015 to 24 students. The two questions were (A) What is your definition of critical thinking in Occupational Therapy? (B) How have you used critical thinking in the OTA Program? Give three examples. This data was analyzed and the following information was brought to light.

100% of the students (24/24) related that critical thinking in OT involved using knowledge, to analyze a situation and create options to solve the problem at hand. These results demonstrate a unified understanding of how

critical thinking is involved in the occupational therapy program. Other unique features of these definitions from OTA students included acknowledgement of OT constructs such as "therapeutic use of self", "reflection in action", and "individualized problem solving to connect the person to their desired occupations". These results demonstrate that we met the direct measure for success with this aspect of the project.

With regard to the second question – "Three examples of critical thinking used in the OTA Program", we found many affirming answers. The following list describes the examples of critical thinking in the OTA Program from the students' perspective.

Critical Thinking Used in the OTA Program: Fieldwork - 67% Practicum - 63% Treatment Planning - 58% Labs -Role Play from Scenarios - 33% Test Taking - 29% Lab Presentation - 25% Managing Life as an OTA Student - 21% Critiques of Self and Classmates - 4% Spinal Cord Injury Environment Adaptation Assignment - 4%

**Implications for Improvements**: In examining the results of having the OTA student definitions of critical thinking aligned with the OTA program's definition, we are recognizing that our efforts at facilitating critical thinking are on target. With regard to defining critical thinking, our efforts in coursework continue to produce expected outcomes.

In terms of examining where critical thinking is evidenced within the curriculum, it is clear that Fieldwork and Practicum experiences have students utilizing these skills and acknowledging their importance. Other activities within the program that student's identified using their critical thinking skills involve treatment planning, labs/role play and test taking. What we were surprised to learn is that even from a personal perspective, critical thinking is linked to life management as an OTA student where these skill are recognized as important to success within the program.

With regard to improvements to the program, we will continue to have an emphasis on the projects that facilitate the development of critical thinking and these include Fieldwork, Practicums, treatment planning and role playing labs. We have also reviewed the program's exams for critical thinking content. To facilitate ease with addressing the critical thinking questions, we are introducing examples of these questions for in-class review for each content area covered in class for the second year of the program. We feel that having students understand the processes involved in answering these type of questions, can also enhance critical thinking in test taking. The OTA program students will be taking a registration exam/national boards at the end of all coursework in the program and we feel that this process may also enhance the outcomes of that exam as well.

**D. Results:** Survey students following Level II Fieldwork experience for definitions of critical thinking (analyze for change), presenting the instructional unit and engaging in a focused discussion of their critical thinking experiences at Fieldwork II. This aspect of the assessment project on critical thinking has been postponed until Fall, 2015/Spring, 2016. No data was collected as the OTA Program students who completed the initial definitions of critical thinking are still completing Level II Fieldwork.

**Implications for Improvement:** Will continue to collect data for future OTA Program assessment projects.

### Second Pursuit – Evaluating OTA Students' Use of Critical Thinking Skills and Facilitation of the Development of These Skills

**2A. Results**: Evaluation of the effectiveness of the OTA student's critical thinking skills in relation to clinical competence as they enter Fieldwork II (capstone clinical education) was initiated through examining the scores on the exit practicum. Following the completion of clinical coursework (Level II Fieldwork – OTA-215 – 216) the grades for their clinical performance inclusive of critical thinking components were also collected and analyzed. It was believed that all student who successfully complete the exit practicum (using their critical thinking skills to achieve success in this practicum) on their first attempt would achieve an average of 80% or greater on their physical disabilities clinical education course - OTA-215-216- (where critical thinking skills are used routinely to solve problems for patients/clients). This objective was partially met. These are the following results.

- 100% of the students completed the exit practicum on their first attempt. This is something that has not happened since the practicum has been initiated. This means that no students required remediation for critical thinking skills to successfully pass the exit practicum.
- The average score of the practicum was a 91%. Students must pass their practicum at an 80% to be able to go onto Level II Fieldwork.
- In terms of fieldwork performance, 92% of the OTA Program students passed fieldwork on their first attempt. The average score of fieldwork for these students was an 86%.
- 8% or two students did not pass Fieldwork on their first attempt for reasons of professional behavior/stress management and documentation expectations.
  Following remediation, these two students successfully passed fieldwork to complete the program with an average score of 92%.

**Implications for Improvements**: We were happily surprised with the practicum results for this OTA student cohort. With all students passing the practicum, we reviewed the supports and their progress through the OTA program. We recognize that a 100% pass rate on an exit practicum is an exceptional outcome. Our outcome for fieldwork was positive, but not unanimous. The two students who did not pass fieldwork despite an 80% or greater pass rate on the exit practicum relate more to professional behaviors than to critical thinking upon review. Suggestions from previous student cohorts related that the practicum experience should be used every semester to build skills and confidence for fieldwork. This group of students did benefit from having a more comprehensive practicum each semester. This group of students also participated in supplemental practice sessions that were held to facilitate critical thinking during the practicums. In examining the results of this aspect of the assessment project, we will continue offering formative practicums each semester and will offer additional practice sessions for building critical thinking skills.

**2B. Results**: Feedback from students following the completion of two capstone clinical courses (OTA-215 & 216) were sought with the creation of a survey of the practicum experience (see supplemental handout). It was predicted that eighty per cent (80%) or more of students who have completed physical disabilities clinical coursework OTA-215 or OTA-216 will rate the exit competency process as a contributor to success of the use of their critical thinking skills and for the success in the clinical education experience where these skills are expected and used with every patient/client interaction. The results indicate that we have met our benchmarks. The following values reflect this indicator.

- 83% of the students (20/24) related that the experience of the exit practicum assist them with the critical thinking skills needed to successfully complete their Level II Fieldwork (OTA-215-216). The rating they offered was a 5/5 on the Likert scale survey indicating highest value in the use of this practicum.
- 17% of the students (4/24) rated the practicum as helpful to their success in building critical thinking skills needed to succeed at Level II Fieldwork. The rating they offered was a 4/5 on the Likert scale survey indicating an above average rating in the use of this practicum.
- There were no ratings offered for "average" (3/5), "below average" (2/5) or "no value" (1/5) for the use of this practicum in facilitating critical thinking skills. In other words, all results indicated a positive value in enhancing critical thinking skills needed for successful completion of Level II Fieldwork.
- Students offered many positive and helpful comments about the experience in the open comment section. "I believe the skills we learned will stay with us forever as we enter the profession." "The practicum is very useful for level II fieldwork preparation." "Great experience, as it gave me the ability; to be a better OTA." "It was challenging and hard work but well worth all the time I invested in the project." "The staff at my fieldwork said that I was academically and clinically well prepared for critical thinking at their facility." "I especially liked working in the nursing classroom as it gave us a feel for the hospital setting and more room to work in than the OTA classroom." "It was a great experience but it would be

nice to have more evaluation tools available for students to practice with at home."

**Implications for Improvements**: The results of this aspect of this assessment project are very important to us, in that the students' perception of the experience give it greater value in their professional development. The OTA program will continue to use the exit and other formative practicums to advance critical thinking skills for clinical education and the future as a well-prepared OTA. At this time we will also consider continuing to survey the students' opinions of the experience. We learn much from their perspectives. Additionally, we will seek support for obtaining more assessment tools so that students can borrow these for practice at home and will work with the nursing program at Wright College to respectfully use their lab classroom for practicum taping and practice sessions.

**2C. Results:** The final section of this assessment project is the analysis of supplemental and remedial skill building effects on exit practicum performance. It is believed that students who participate in remediation sessions or supplemental skill building sessions for skill development will evidence a score of 80% or greater on both the exit practicum (using their enhanced critical thinking skills to achieve success in this practicum) and the physical disabilities clinical course - OTA-215-216 - (where critical thinking skills are used routinely to solve problems for patients/clients). This aspect of assessment was difficult to fully track and correlate to both practicum and fieldwork success. However, we did track the attendance at the five supplemental sessions and student perceptions of these additional supports.

- 92% of OTA students participated in at least one supplemental session.
- 33% participated in at least 2 supplemental sessions.
- 13% participated in at least 3 supplemental sessions.
- 25% participated in at all 5 supplemental sessions.
- 2/24 students did not participate in supplemental sessions and of these two one did not pass Level II Fieldwork but did pass the exit practicum.
- 1/24 students participated in all 5 supplemental sessions but did not pass Level II Fieldwork but did pass the exit practicum.
- Students did identify the different methods of practicing for practicum in the survey (group, classroom supplemental sessions, individual session supports, etc.) and all (24/24) students related that practice was important to the success of passing the practicum.

**Implications for Improvements**: It is difficult to precisely correlate participation in supplemental skill building sessions and success in practicum and fieldwork but what is recognized by the results is that the students value practice as a path to success. It is an intuitive and practical consideration. In an effort to maintain the success of passing the practicum, supplemental skill building sessions will continue to be offered to OTA students in the second year of the program as they progress to Level II Fieldwork. Tracking of these efforts will continue as well.

### Summary of Results and Implications for Improvement for the OTA Program Assessment Projects:

### First Pursuit: Unified Definition of Critical Thinking in Occupational Therapy

**1A.** A unifying definition of critical thinking for the OTA Program was achieved. The implications for improvement assisted with identifying future coursework to support critical thinking.

**1B**. An instructional unit of critical thinking was created for OTA and other interested students. The implications for improvement involve using this instructional unit with OTA-106 students considering OTA as a profession.

**1C**. OTA Program students identified the same components to critical thinking as the OTA program's definition. OTA program students identified the areas where critical thinking is used in the OTA program. The implications for improvement involve keeping the assignments that involve the highest demand for critical thinking skills (Fieldwork, practicum, treatment planning, Labs-Role Play from Scenarios). A second implication involves enhancing the critical thinking needed for exams by exploring in-class presentation and discussion of critical thinking questions for each content area for the second year of the program.

**1D.** The OTA Program third year students will be surveyed for a definition of critical thinking following the Level II Fieldwork experience and the results will be analyzed for content. The implications for improvement will be sought following the collection and analysis of this data to see if the components of critical thinking have changed with enhanced use of these skills during clinical coursework.

## Second Pursuit: Evaluating OTA Students' Use of Critical Thinking Skills and Facilitation of the Development of These Skills

**2A.** The student performance on the exit practicum and Level II Fieldwork courses were examined. Each of these experiences requires effective use of critical thinking skills. The implications for improvement relate that continued use of the exit practicum supports successful completion of Level II Fieldwork.

**2B.** Student perceptions of the exit practicum offered continued support for its importance in preparing for the critical thinking needed for Level II Fieldwork. Both quantitative and qualitative data were derived from this survey. The implications for improvement were related. The qualitative data identified the need for more space to prepare for and record the practicums (i.e. nursing classroom was useful for this purpose) and that more assessment equipment would be helpful so that home practice could occur with study groups.

**2C.** The final aspect of this assessment project for the OTA Program related the support to facilitate critical thinking in terms of supplemental skill building sessions. Students valued this practice and related that it was important to the success of passing the practicum and preparing them for Level II Fieldwork. Implications for Improvement relate that continued supplemental skill building session will be offered to OTA students in preparation for these critical thinking experiences.

