



# Study Abroad Analysis of Perceived Critical Thinking Skills for Department of Global Education September 2011

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## Executive Summary

The Study Abroad analysis includes the results from three separate surveyed groups: Pre-Study Abroad (N=27), Post-Study Abroad (N=14), and a Control Group (N=57), which consisted of students taking general education courses during TCC's summer session. All three student groups were e-mailed and asked to complete the same survey, consisting of Likert-scale and open-ended questions. The first six survey questions focused on the students' perceptions of their critical thinking skills. The remaining questions examined how helpful different TCC experiences were in improving their critical thinking skills, with opportunity given to explain if "Other" was selected.

- The means on the six self-perceived critical thinking items were all 4.00 or higher for the Post-Study Abroad group. It is important to note that these values reflect their perceptions of their critical thinking and not their actual critical thinking abilities.
- The means are presented for both the critical thinking composite score (reflecting the average of the six individual items) as well as for the six individual items themselves.
- Differences between the mean so the Pre- and Post-Study Abroad groups could not be analyzed with a significance test because it is unknown which students completed the survey at each time period (e.g., some students may have completed at both times and some may have completed at only one time).
- None of the differences in means between Control and Post-Study Abroad groups were statistically significant. One possible explanation for the lack of significance is the very small sample size in the Post-Study Abroad group (N=14).
- In the context questions, students reported that "study abroad" was significantly more helpful in improving their critical thinking skills than were other specific contexts (i.e., a TCC class; being a member of a student organization; a TCC social activity; instructional labs, tutoring; the LRC).
- Students' explanations for "Other" responses and general student comments are listed on pages 4 through 10.

## Mean Ratings of the Three Groups for Critical Thinking Questions

How would you rate your ability to think critically?	Pre-Study Abroad <sup>a</sup>	Post-Study Abroad <sup>ab</sup>	Control <sup>b</sup>
When exposed to new facts and terms, I can define, describe, and reproduce them.	3.78	4.29	4.25
When new information is presented, I can understand it, summarize, and explain it in my own words.	4.11	4.50	4.25
After learning something new, I can apply what I learned to new situations and solve problems based on what I have learned.	4.19	4.43	4.32
When presented with new information, I can break it down, compare and contrast its various parts, and draw out implications.	3.93	4.14	4.12
With information I have learned, I can organize it in new ways, create something new, and integrate it with other things I already know.	4.11	4.00	4.20
When faced with new information, I can critique it, assess its value, and interpret what it means.	4.15	4.43	4.23
<b>Composite mean score across all six questions above</b>	<b>4.04</b>	<b>4.30</b>	<b>4.24</b>

Question Options: 1=Almost never, 2=Seldom, 3=Sometimes, 4=Often, 5=Nearly always

<sup>a</sup> Pre- and Post-Study Abroad groups cannot be compared in a significance test since it is unknown which students completed one or both of the surveys.

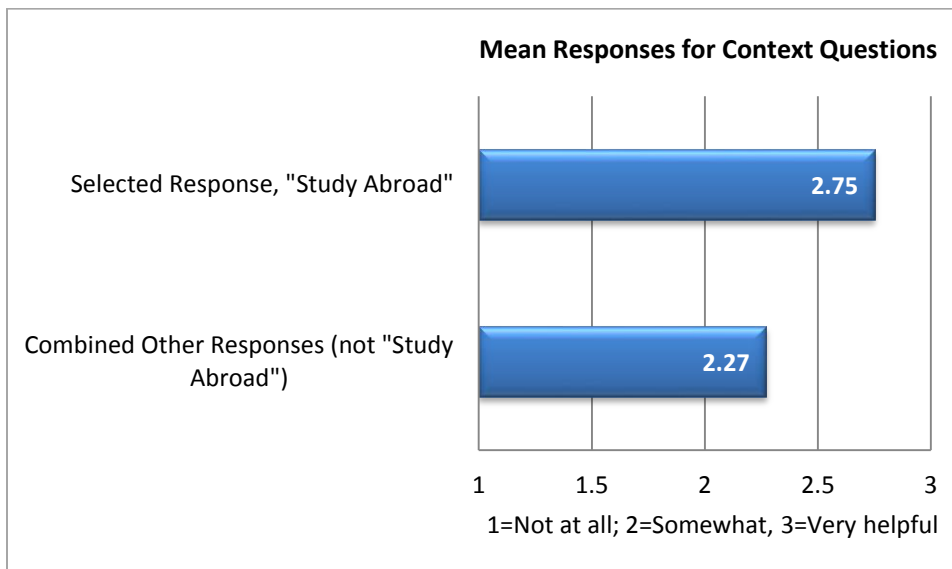
<sup>b</sup> There is no significant difference when comparing the Post-Study Abroad and Control groups.

## How helpful were different TCC contexts in improving various aspects of critical thinking?

Means were calculated by averaging responses to the questions, "How helpful were the TCC experiences in ..."

- ... improving your ability to comprehend complex ideas, data, and concepts?
- ... improving your ability to make inferences based on careful observation?
- ... making judgments based on specific and appropriate criteria?
- ... solving problems using specific processes and techniques?
- ... recognizing relationships among the arts, culture, and society?
- ... improving your ability to develop new ideas by synthesizing related and/or fragmented information?
- ... improving your ability to apply knowledge and understanding to different contexts, situations, and/or specific endeavors?
- ... improving your ability to recognize the need to acquire new information?

### Study Abroad Responses Compared to All Others Combined



1) Combined Other Responses include the following other contexts: a TCC class; being a member of a student organization; a TCC social activity; instructional labs, tutoring; the LRC (Learning Resources Center or Library).

**2) The difference between the mean for the "Study Abroad" response and the mean for the "Other" responses combined was statistically significant,  $p = .001$ .**

### Open-ended Questions for Explanation of "Other" (all groups included)

**Of all your experiences at TCC, in class and outside of class, what has helped you the most to enhance your critical thinking skills?**

- Adult life experiences.
- All components of the nursing program: theory, lab, and clinical.
- All of the classes that I have completed at TCC have helped me greatly because I am currently in a program in a 4 year college and doing very well in all of my program required classes.
- Applying the information to real-life situations.
- Applying what is learned in real situations.
- Assessments from nearly every environment I've been in.
- Attending economics and humanities classes, meeting new people.
- Because I value my GPA, I've had to pay a tutor outside TCC, in order to understand and learn the material in a different way, or drop the course all together. This has been the worst semester yet. I know that summer is condensed, but my professor assigns homework that has absolutely nothing to do with the test. Everyone failed our second test and her solution was for us to find the answers, re-take the test, but she will change the questions. I don't see how we can pass the second test if we can't pass the first one. Most of my professors are doctors that know the material, but can't seem to teach it.
- Being able to confirm my thesis with my instructors.
- College survival class.
- Compare and contrasting, class discussion and questions.
- COMPOSITION 1.
- Composition I & II and the application of what I learned to my other classes.
- Composition I with Thomas Culpepper.
- Computer skills.
- Dental Hygiene school!
- Doing different activities with information.
- Field trips! I learn best when putting what I've learned in class into work outside the classroom.
- Finding out I'm not the only one having trouble with this new concept, sometimes if I can see the concept in real life terms I find that helpful in knowing what it means.
- Hands on activity, being involved in the topic that is being learned.
- Hands on and visuals.
- Hands-on labs in IT.
- Having different instructors with different teaching styles has helped me expand my ideas of learning. On the study abroad course I was exposed to a great deal in a short amount of time and the ability to adapt and absorb quickly is definitely having a positive effect on my current ambitions in rehabilitation.
- Humanities classes.
- I am not a traditional TCC student, but I think all of my life experiences together have helped enhance my critical thinking skills - certainly including my formal education, parenting, past employment, community/church involvement...
- I like to have a strict routine. I don't like laid-backness..I tend to slack.
- I think my Honors Comp II class tested and enhanced my critical thinking skills the most.
- I would have to say working in the human service department, basic counseling, and the

practicum/internship experiences.

- I would say it would have to be last semester's Sociology class.
- Interacting with other students, discussing concepts and skills.
- Intro to Cultural Geography.
- It helps when the teachers lecture extensively on a subject, giving you a base to work off of.
- Just the process of doing the work in my General Ed classes has been the most beneficial to my critical thinking skills.
- Just the whole environment of school.
- Laboratory classes where I work with my hands.
- Listening to others point of view.
- Logic and critical thinking.
- My clinical experience in the nursing program.
- My practice with the concept of "text, context and subtext" learned in my humanities class with Professor Maduro. I get a clear and deeper understanding with this analysis.
- My professors have been extremely helpful in the transition of returning to college life after so many years of work and married life. The fear factors have been very much put at ease. I have been able to apply my studies in the classroom and outside with home and work environments. I am so grateful for the opportunity to return to TCC (formerly, in my years, TJC) and begin a fresh new focus on career.
- None really. I had a high pressure job that required me to think both inside and outside of the box. I'm just using my previous experiences while at TCC.
- Nursing school clinicals.
- Participating in a class discussion, doing my own research on topics for something presented in the class, having assignments given specifically asking for your own opinion or your own thoughts, etc.
- Probably my experience learning methods of mathematics, management classes, and business in general. All those subjects teach you in various ways how to have a multi-dimensional approach when looking at a topic, no matter what it might be. Whether using numbers or applying your own spin on things, these classes help you hone your approach.
- Putting me into a new situation and then letting me learn about it for myself in my own ways.
- Reading and discussion.
- Reading and rereading about the information to understand it better, or watching power points to enhance the main ideas.
- Real world experience.
- Really, the best aid has been some incredible teachers. I have had the opportunity to be in several classes with wonderful instructors. Dr. Rosemary Carlson, Mr. Wayne Frazee, Mrs. Sasha Townsend, Mr. Terri McDevitt, Mr. David Pavey, the list goes on. They are all wonderful and have helped tremendously.
- Re-reading something until I can understand it and process it, plus interaction with others in the same setting or classroom. But, above all it is myself who takes the time to understand and process things my way and then summarize them.
- Researching the information on-line.
- Russell Sowell, David White, and Michael McWilliams are three excellent teachers that I've had, all of whom stressed critical thinking and analysis.
- Seeing how so many things can point to the same concepts.
- Simply the vicissitudes of life with correlations to my education.

- Simply the vicissitudes of life with correlations to my education.
- Small group conversations, where opinions are freely expressed, challenge my critical thinking skills.
- Some of the professor teaching methods.
- Statistics
- Student-teacher interactions.
- Studying art in college.
- Studying.
- Taking several classes which require me to think critically.
- Teacher/ Student Communication.
- Teachers/assignments that challenge my critical thinking skills.
- The board game called Cranium has a category with various word puzzles that help me to think critically in order to solve them and it is done in an interesting way.
- The experience at TCC that helped me the most to enhance my critical thinking skills was my anatomy class.
- The hands-on application of the theory content explained in lectures has facilitated the opportunity to prove my new knowledge in the highest level. I know that the nursing curriculum has, by nature, enhanced my critical thinking skills in order to deliver high quality and accurate care to the people I serve. My experiences in class, clinicals, and volunteer in the community through SNA, have all given me an opportunity to sharpen my skills to think critically.
- The Nursing Program and its professors at TCC. (Most of them)
- The teacher's enthusiasm and creativity in teaching the course is a crucial component, and their ability to do this has directly impacted my desire to use my critical thinking skills.
- The teachers that I've had took time to explain it better if needed.
- This is my first year with TCC and I am taking online classes so nothing has.
- Time spent on research and studies.
- Trying new things and interacting with all of my classmates.
- Utilizing the math labs and other learning resources.
- When certain teachers have asked questions pertaining to assignments that really force you to think before you provide an answer, that really helps me. Some questions you can't just provide a generalized answer.
- With only one semester under my belt I do not feel that I can answer this question accurately. Though some negative experiences with the financial aid department have improved my record-keeping skills, I cannot shed light on other critical thinking areas.
- Working on the staff of the Connection has had a major impact on my critical thinking skills.
- Writing papers.

**Comments section from question, "How helpful were the TCC experiences in improving your ability to comprehend complex ideas, data, and concepts?"**

- Again, the teacher's ability to make the subject "come alive" has made all the difference.
- Discussing with other students.
- I'm a member of the RISE organization, they making college enjoyable.
- Math lab.
- The internships really help you to decide if that is the field that you will enjoy.
- The learning disabilities office is very helpful. They directed me to the "Reading Ally" and has most of my college books online for me to listen to my books as well as follow along with the books in front of me.
- The outside communication of my professors is not only surprising, by so refreshing. I have felt very in touch with each of them and confident they would reply and respond in a prompt and professional manner.
- The teachers. The fact that they are not accounted for, but as others is kind of haphazard in my opinion. My teachers that I grew close to not only helped me, but they pushed me to accomplish more. Even when I thought I might not be cut out for something, they helped me find the motivation needed to rise to my full potential.
- Tutor for math.
- Using a skill or formula in the work place or field it was applicable to, would help cement that knowledge in the mind.

**Comments section from question, "How helpful were these TCC experiences in improving your ability to make inferences based on careful observation?"**

- I have only so far taken online classes, so my grasp of what TCC can do for me is limited.
- The different opportunities that I experienced being in Dr. Wallace's and Dr. Potts' classes.

**Comments section from question, "How helpful were these TCC experiences in making judgments based on specific and appropriate criteria?"**

- Don't understand why I have to take so many classes that are not a part of my degree. Do not have extra money for these classes, having to take out loans just to go to school,( white collar) while others can get all the help needed without paying it back.
- Math lab.

**Comments section from question, "How helpful were these TCC experiences in solving problems using specific processes and techniques?"**

- Math lab.

**Comments section from question, "How helpful were these TCC experiences in recognizing relationships among the arts, culture, and society?"**

- Math lab.
- My language teachers especially taught me a lot about cultural aspects that I otherwise might have let go unnoticed. Mariko Takahashi and Fumie Horne, my Japanese instructors, taught me a lot about the culture of Japan that went above and beyond, but also tied into the context of the language I was studying. For this reason, I feel I have had a more well-rounded experience.

**Comments section from question, "How helpful were these TCC experiences improving your ability to develop new ideas by synthesizing related and/or fragmented information?"**

- Math lab.

**Comments section from question, "How helpful were these TCC experiences improving your ability to apply knowledge and understanding to different contexts, situations, and/or specific endeavors?"**

- Math lab.
- The Career Exploration staff has not only provided me with wonderful information for confirming my thoughts on career path, but have been so interactive in providing new ideas and options which are sure to enhance the diverseness of my Psychology degree and the future employment options.

**Comments section from question, "How helpful were these TCC experiences improving your ability to recognize the need to acquire new information?"**

- Going through the "financial aid crisis" of summer 2011, it helped me to realize that record keeping helps with debating/arguing improper information.
- Math lab.



### General Comments:

- Developmental and mentally stimulating.
- Expanding my borders and whetting my appetite for a global awareness.
- I began frightened, grew to be captivated, and left enlightened. It was eye-opening and exhausting, yet totally fulfilling.
- I excelled in learning about a completely different culture outside the U.S. while comparing it to mine.
- I look forward to participating in this study abroad experience and all it has to offer.
- I love math lab.
- I really appreciate the opportunity to participate in this learning experience of a lifetime!
- It was an eye-opening experience. Wonderful to see another culture in a true to life setting, not just in a media setting.
- My first experience abroad was a wonderful opportunity to see history/culture in person.
- My study abroad experience was a breathe-taking, eye-opening encounter.
- My study abroad trip was amazing and it really helped me in seeing how the rest of the world works. It was an experience i will never forget.
- Online classes are confusing. They don't state clearly where tests are located and stuff.
- TCC is a great community college.
- Thanks for asking the same question 7 times!
- The experience is a wonderful eye-opener, embracing new cultures feels that the world of life is bigger than one's life experiences.
- This was a complete waste of time, YOU people need to get a life you more or less asked the same question 10 or more times, STOP bothering me with this.
- This was a wonderful and enlightening experience that I will never forget!
- Too much instruction and too less freedom to explore alone.