

Motivating Factors for Continued Use of Information Literacy & Critical Thinking Skills

Dear Colleagues,

The following findings, and implications, come from my doctoral research on motivating factors for undergraduate students' continued use of information literacy and critical thinking skills. Sections on this sheet provide URLs where you can read data from my study.

If you have questions or would like to discuss these topics, please feel free to contact me.

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■ Abstract

At colleges and universities across the United States, first-year undergraduate students take courses that involve the learning and practice of higher-order thinking skills. Higher-order thinking skills support students' ability to draw abstract principles from concrete learning experiences over time. They include CT and IL, among others. This mixed methods study examined motivational factors that support students' academic transfer of these skills (i.e., students' ability to apply CT and IL on their own after they have learned to use them).

This study used a survey of 24 students who were enrolled sections of CU Denver's FYS in Fall 2018 during their first semester as undergraduates. Students were asked to submit a paper written during their second semester as undergraduates and then complete a survey regarding their motivations for continuing to apply CT and IL skills to their academic work. The study focused on identifying the most prevalent motivating factors among all students. However, it also examined specific correlations between rubric performance and motivating factors.

■ Motivating Factors Related to Information Literacy

Students were asked to rate the influence of nine motivating factors on their choice to use information literacy skills. They rated the skills on a four-point Likert-style scale. The order in which students identified motivating factors for use of information literacy skills was (from most to least popular):

1. I believe in researching the reality behind what I see and hear.
2. I believe in searching for reliable information sources to learn about important.
3. I believe that strong IL skills will help me in my future career.
4. I believe that strong IL skills will help me to succeed in a future degree program (for example, a master's degree, law degree, medical degree, or Ph.D.).
5. My instructors require IL as part of assignments and/or give points specifically for information literacy (such as finding articles in journals or going to the library).
6. I have learned to appreciate IL through experiences that I have had outside of school (for example, in my social life, while writing or pursuing other creative hobbies, or while reading/watching media related to personal interests).
7. It is easy and/or natural for me to use IL skills now.
8. My classmates' performance in class or study sessions inspires me to use my IL skills.
9. Other students (classmates, friends, peer tutors, etc.) have recommended that I use IL skills on my assignments.

Note: Quantitative data on the nine motivating factors are available at: <http://karensobel.co/dissertation>

■ **Motivating Factors Related to Critical Thinking**

Students were asked to rate the influence of nine motivating factors on their choice to use CT skills. They rated the skills on a four-point Likert-style scale. The order in which students identified motivating factors for use of CT skills was (from most to least popular):

1. I believe that strong CT skills will help me in my future career.
2. I believe in thinking critically about important topics.
3. I believe in thinking critically about what I read and hear.
4. I believe that strong CT skills will help me to succeed in a future degree program (for example, a master's degree, law degree, medical degree, or Ph.D.).
5. I have learned to appreciate CT through experiences that I have outside of school (for example, in my social life, while writing or pursuing other creative hobbies, or while reading/watching media related to personal interests).
6. My instructors require CT as part of assignments and/or give points specifically for CT.
7. It is easy and/or natural for me to use CT skills now.
8. My classmates' performance in class or study sessions inspires me to use my CT skills.
9. Other students (classmates, friends, peer tutors, etc.) have recommended that I use CT skills on my assignments.

Note: Quantitative data on the nine motivating factors are available at: <http://karensobel.co/dissertation>

■ **Correlations Between Motivating Factors and Performance on the Writing Sample**

Students submitted a writing sample, which a colleague and I evaluated for IL and CT performance using a modified version of the AAC&U VALUE Rubrics for IL and CT. Interestingly, only one significant correlation (mild; negative) appeared. Under my advisor's guidance, I discarded that correlation as "noise."

The positive side of this finding is that we can think of all of these motivating factors in terms of how they appeal to all students, rather than in terms of higher or lower performers. We can confidently use the idea of careers, for example, and know that it appeals to students whose skills are at a wide range of developmental levels.

■ **Implications of this Study**

Based on data gathered throughout this study, I have identified seven potential - and practical - implications for higher education. I list the implications briefly below, then provide a brief section discussing each implication with reference to the research supporting it. The implications are as follows:

- Since similar factors best motivate students to use CT and IL, you can create powerful lessons combining both.
- Students of all performance levels share motivating factors.
- Have conversations about CT and IL skills in future careers. Include examples, but highlight flexibility.
- Invite students to fact check and search for "the truth behind" media stories and big ideas.
- Peer mentors may need coaching on how to model and critique students' use of CT and IL.
- Teach students how to learn from role models and examples of excellent CT and IL.
- Coach students on how to provide feedback on each other's skills in both formal and informal situations.