Recommendations for Continuous Improvement based on Student Artifacts Results

QEP Evaluation Question: To what extent did students demonstrate critical thinking skills?

**SLO: Explain Questions, Problems, and/or Issues**

- It is recommended that faculty include in their syllabi the specifics of what they expect students to do for each outcome and/or for the assignment. This will help to determine which assignments and directions/ explanations lead to higher levels of critical thinking.
- Critical thinking learning outcome language needs to be introduced to students early in the semester and reinforced throughout the semester.
- Provide opportunities for faculty to improve their CT assignments.
- Faculty could encourage that students use resources including BC Writing Lab, BC Academic Success Centers (ASC), and SmartThinking to improve writing skills and Critical Thinking skills.
- Continue the process and involve more faculty in asking these questions and becoming aware and attentive to the design of assignments, assessments, projects, class structure, and extracurricular activities.
- The more focus given to the process, the more the tools can be enhanced to become closer to demonstrating and/or exceeding the standard.
- Find ways to integrate examples, illustrations, scenarios
- Develop more enhanced qualitative instruments. Should we develop an in-house instrument that looks at student disposition? If so, working with PD office would be necessary.
- Rather than aggregate numbers, is it possible to have more detailed information on individual student performance? In addition to knowing how much an SLO changed, shouldn’t we be interested in “how” it changed?
- Should we look at the qualitative development of thought rather than statistical? (Connects with the recommendation about looking at a student’s disposition.)
- To truly test whether the skills have been mastered and not just mimicked, have the professors assess the students in role playing based assessments using real life situations and not just concepts covered in class.
- Reporting: For next IRPEA Report, on page 15 – Change “All Scholars” in the title to “All Participants”
- Incorporate the Degree Qualification Profile (DQP) Assignment Library as a resource for faculty [http://www.assignmentlibrary.org/](http://www.assignmentlibrary.org/)

**General Comment:** Look at making appropriate revisions to the scoring guide.

**SLO: Analyze and Interpret Relevant Information**

- It is recommended that faculty include in their syllabi the specifics of what they expect students to do for each outcome and/or for the assignment.
- CT language (Paul-Elder model, SLO actions) needs to be introduced to students early in the semester and reinforced throughout the semester.
- Provide opportunities for faculty to improve their CT assignments.
- Faculty could encourage students to use resources including BC Writing Lab, BC ASCs, and SmartThinking to improve writing skills and Critical Thinking skills.
Recommendations for Continuous Improvement based on Student Artifacts Results

QEP Evaluation Question: *To what extent did students demonstrate critical thinking skills?*

<table>
<thead>
<tr>
<th>SLO: Evaluate Information to Determine Credibility of Reasoning</th>
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<tr>
<th>SLO: Generate Well-reasoned Conclusions</th>
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<tr>
<td>- Make sure assignments are designed to expect a conclusion that is well-reasoned.</td>
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<td>- Make sure students are being taught how to do this prior to this assignment.</td>
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<td>- Faculty could encourage students to use resources including BC Writing Lab, BC ASCs, BC Library Information Literacy workshops/sessions, and SmartThinking to improve writing skills and Critical Thinking skills.</td>
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<tr>
<td>- With respect to critical thinking overall (especially being able to apply critical thinking skills outside of the controlled classroom setting): look to colleges which have designed separate critical thinking classes (not embedded into a content class) for ideas of warm-up exercises, real-life scenarios, and role playing as a way both to teach and to assess critical thinking either across disciplines or simply external to academic situations.</td>
</tr>
</tbody>
</table>

- **General Comment:** Review the engagement of Emerging Scholars to maximize the opportunities for students to demonstrate mastery of the student learning outcomes.
### Recommendations for Continuous Improvement based on CCSSE/CCFSSE Results

**QEP Evaluation Question:** *To what extent did faculty and students perceive using complex critical thinking in their coursework?*

#### Analyzing the basic elements of an idea, experience, or theory

- Faculty can increase their expectations for students in all these areas. In addition, they can explicitly teach these skills in all the critical thinking activities.
- Continue to increase awareness of terminology and skills among students through inclusion in courses and in key services to students (workshops, labs, orientations, etc.).
- Create a toolbox to be able recognize and apply this skill. This “toolbox” would have a faculty component and a student component. The “toolbox” design would be a collaborative process among appropriate College stakeholders. The “faculty toolbox” would contain resources that faculty could adapt to their own specific discipline needs. The “student toolbox” would be a little more general. In both cases, the primary goal would be to achieve consistency with respect to development and measurement of critical thinking skills.
- Incorporate the Degree Qualification Profile (DQP) Assignment Library as a resource for faculty [http://www.assignmentlibrary.org/](http://www.assignmentlibrary.org/)

### Synthesizing and organizing ideas, information, or experiences in new ways

- Faculty can increase their expectations for students in all these areas. In addition, they can explicitly teach these skills in all the critical thinking activities.
- Continue to increase awareness of terminology and skills among students through inclusion in courses and in key services to students (workshops, labs, orientations, etc.).
- Create a toolbox to be able to recognize and apply this skill. (Toolbox described in 1st recommendation section.)
- Incorporate the Degree Qualification Profile (DQP) Assignment Library as a resource for faculty [http://www.assignmentlibrary.org/](http://www.assignmentlibrary.org/)

### Making judgments about the value or soundness of information, arguments, or methods

- Faculty can increase their expectations for students in all these areas. In addition, they can explicitly teach these skills in all the critical thinking activities.
- Continue to increase awareness of terminology and skills among students through inclusion in courses and in key services to students (workshops, labs, orientations, etc.).
- Create a toolbox to be able to recognize and apply this skill. (Toolbox described in 1st recommendation section.)
- Incorporate the Degree Qualification Profile (DQP) Assignment Library as a resource for faculty [http://www.assignmentlibrary.org/](http://www.assignmentlibrary.org/)
Recommendations for Continuous Improvement based on CCSSE/CCFSSE Results

QEP Evaluation Question: *To what extent did faculty and students perceive using complex critical thinking in their coursework?*

<table>
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<tr>
<th>Applying theories or concepts to practical problems or in new situations</th>
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<td>• Create a toolbox to be able to recognize and apply this skill. (Toolbox described in 1st recommendation section.)</td>
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<td>• Develop assignments that foster “new situations” around real-world experiences and/or project-based learning</td>
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<th>Having students use information they have read or heard to perform a new skill</th>
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<td>• Work collaboratively with librarians to develop information literacy assignments that are content specific.</td>
</tr>
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Recommendations for Continuous Improvement based on CCSSE/CCFSSE Results

QEP Evaluation Questions: To what extent does the College experience contribute to students' knowledge, skills, and personal development in thinking critically and analytically? In solving numerical problems?

**Thinking Critically and Analytically and Solving Numerical Problems**

- It is important to make sure that students and faculty have a common language of critical thinking.
- Continue to provide professional development for faculty to better understand what the College means by critical and analytical thinking.
- Define terms for students and faculty.
- Use real-life (world) numerical problems in non-STEM and business related courses, so students have more opportunities to solve numerical problems. For example, Pell Grant and/or GPA calculation and its impact on life and future; what happens to GPA or Pell Grant if you drop a class? What are the consequences? What are students’ perceptions of those consequences?
- Continue to increase awareness of critical thinking terminology and skills among students through inclusion in courses and in key services to students (workshops, labs, orientations, etc.).
- Reduce faculty's perception of students’ incoming level of numerical skills and work to improve them from where they currently are. IRPEA could share more data re: students’ incoming level of numerical skills.
- Suggest professional development training on terms and processes in critical thinking
- Train professors to be as specific as possible in terms of expectations for assessments and describing/explaining what critical thinking is.
- Incorporate the Degree Qualification Profile (DQP) Assignment Library as a resource for faculty [http://www.assignmentlibrary.org/](http://www.assignmentlibrary.org/)

**Recommendations for Continuous Improvement based on CCSSE/CCFSSE Results**

QEP Evaluation Question: How often have students worked on a paper or project that requires integrating ideas or information from various sources?

**Integrating Ideas/Information from Various Sources**

- Get demographics for faculty to provide a better picture, so we can make a more informed decision about results
- Contact the Center for Community College Student Engagement and ask about the student and faculty survey questions
- Incorporate papers and projects that are relevant to students and incorporate real world learning
- Provide professional development for faculty to improve on the quality of the assignments.
- Work with librarians to collaborate on assignments and/or request an “embedded librarian” for a course