Abstract

The Core Learning Skills Pilot Project was developed by the Committee on Teaching and Learning (CTL) and the Academic Senate to support faculty in their related efforts to identify, assess, and evaluate strategies aimed to increase student motivation and engagement, to address underpreparedness, and to make the college’s core learning expectations clear to students. A major objective of the initiative is to help us teach students to master the core skills set out in the GEs/ISLOs, skills needed for academic success, for career achievement, and for lifelong learning. Another objective is to show faculty that ISLOs are not just an accreditation requirement and a meaningless burden, but could actually be used to involve students in their own learning. The Core Learning Skills Pilot Project has selected 6 classes to explore student participation in their own learning through initial self-assessing surveys, validating/invalidating assignments, and classrooms discussions of the issues involved.

Participants

Patrick Foster (Construction Technology), chair, Blakely Barron (Biological Sciences), Melanie Eckford-Prossor (English), Elizabeth Imhof (History), Kathy O’Connor (Physical Education), Mark Sanders (Anthropology), Mark Ferrer.

Pedagogical Context

Two contexts have come together at SBCC to generate this project. The first is the general status of many students: underprepared for college and unmotivated. These students often do not know how they are underprepared or how the can get motivated. The second context is one of the charges of the institution itself: making the ISLOs practically part of the student learning process, as part of the school’s intent to create a culture of learning.

The ISLOs were created for the teaching side of pedagogy, but educational research suggests that an emphasis on the learning side is perhaps even more significant. So to make the ISLO core learning skills visible and then meaningful to the students, they were rewritten as a survey with questions and examples, and presented as tangible (the main intellectual and soft skills expected to be learned by graduation), relevant (connected to school and career success), accomplishable (teachers are committed to helping students learn them), and personal (taking control of one’s own learning).

The current project (Fall 2014) is a culmination of work done by the CTL and work done in two successive workshops: a 2013 Winter Intercession Workshop and a Summer 2014 Core Learning Skills Institute. In Spring 2014, CTL was charged by the Faculty Senate to look over the school’s ISLOs and make recommendations about possible changes. After months of wrangling over ISLO change, a suggestion was made not to further burden teachers with ISLO tasks (such a remapping) but rather to get the students involved in recognizing and learning the core learning skills. Work on a self-assessment survey for the student was began, and at the Summer Institute, 16 teachers volunteered to pilot versions of the survey. A small summer study group finalized the survey, talking points for students and teachers, and the outline of a semester project.

Hypothesis

This is a pilot project, so it is an experiment—or series of experiments—to see if students can “own” their own learning: become aware of its strengths and weaknesses, realize its importance in their present and future success, and begin to actively manage it (reprepare).
Taking responsibility for one’s own learning is an active process, and we believe it is precisely the inactivity or passivity of traditional education that robs students of motivation. With a dual-track of learning content and, now, reflecting on that learning, students can feel themselves as proactive learners rather than passive victims of the educational game. Providing them with a precise set of core learning skills appearing across disciplines and being championed in many different courses (and “made visible” across campus) will also enable students to feel the commitment of the institution itself in helping students learn how to learn.

Projects

To test these ideas out, six faculty have formed a Faculty Inquiry Group and introduced a pilot survey project into their classes. (Of the 16 faculty who volunteered at the summer institute, 8 dropped out by Fall, and 2 more dropped out mid-term.

- **Template**: The basic template was: 1) Introductory discussion in which the ISLO concept was introduced (provided student talking points were followed), the survey introduced (presentation including separating ISLOs from course grades, trust-building exercises, semester plan); 2) the student self-assessment survey; 3) an assignment to test the students’ understanding of the core learning skills on the survey (to confirm or disconfirm); 4) the “making it personal” discussion about the survey/assignment alignment; 5) further assignments and discussions; 6) final survey; and 7) final discussion.

- **Common Factors in Survey Approach**: 1) **Teacher preparation**: each participant was mailed a packet with Faculty Inquiry Group Overview, Talking Points, and Common Survey. The pilot group met once independently and again at the FIG workshop during Fall in-service, prior to semester start. 2) **Project Template**: all projects used roughly the same general template. 3) **Project Introduction**: all participants used basic talking points and emphasized that core learning survey-and-assignments were not to be part of student’s grade but rather a new pilot project, that follow-up assignments will give teacher an indication of accuracy of self-assessment, where survey came from (ISLOs), college mission (or culture of learning), etc. 4) **Project Documentation**: participants were asked to keep journals relating successes, failures, project activities, unforeseen consequences/surprises, changes in plan, changes in classroom atmosphere. All participants tallied their survey and assignment responses.

- **Diverse Factors**: 1) **Survey**: One participant adopted the survey questions themselves, while several adapted the survey examples. Some participants discussed the ISLOs themselves along with the survey, while others just discussed the survey. One teacher used ISLO #6; the rest used ISLO#1. 2) **Follow-up Assignment**: participants used quizzes, tests, or essays. 3) **Follow-up Discussion**: due to differences in assignments, follow-up discussions comparing assignment results with self-assessment survey were somewhat varied, although containing common themes. There was also variety in how students responded to the survey/assignment differences. 4) **Final Survey**: [to be added]. 5) **Final Discussion**: [to be added].

Results

The disciplines represented were quite diverse (CT, PE, Anthropology, English, History, Biological Sciences), and the students varied from honors students to program majors to elective-takers to casual students. There were two sets of results: quantitative (scored survey, assignment results, data correlations) and qualitative (anecdotal).

- **Quantitative Results**: Attached are the data from all the classes. As the survey and assignments were meant to begin the discussion about core-learning skills (what they are and how well the
students understand and use them), the quantitative results of the various instruments were less important to us than the awakening of the students to the state of their learning.

- **Anecdotal Observations**: Anecdotal observations are general, often just a sense of things. But with experienced teachers, class observations are still very meaningful. The Pilot Study teachers tried to keep track of responses and discussion points during the very discussions, so could not know what every student was thinking but would be aware of what was said out loud and of the tenor of the session.

The early discussion after the self-assessment survey and follow-up assignments were compared was perhaps the richest for most of the participants. Some of the participants’ observations follow:

- Surprisingly, students were involved in their own learning from the start.
- Students were curious to see where they were underprepared, had gaps in their learning.
- Students were surprised that the basics of learning resided in such a small number of skills.
- Students were surprised that core learning skills were processes rather than facts.
- Classroom atmosphere changed to one of trust rather than antagonism or suspicion.
- Teachers were seen as actively helping students see their underpreparedness, not punishing them for it, and promising to help them remedy it.
- Students were beginning to evaluate the ISLOs/core skills/survey for objectivity, relevance, and accuracy.

- **Summary Reflections**

- Students with highest assignment scores showed little change between initial and final surveys, suggesting they came into course with well-developed critical skills.
- Sixty percent of one biology class felt that more instructors should spend more time discussing the learning process and ISLOs (not just requisite course material).
- All participating instructors agreed that student self-assessment was not an accurate indicator of their skill level (we suspected this going in), but that it was an excellent tool (along with the confirming/disconfirming assignments) to initiate discussion of their real skill levels.
- Post-survey discussions allowed faculty to better explain ISLO purpose and usefulness.
- Most participating faculty felt the class discussions brought out the fact that success in the classroom is a partnership between students and instructors.
- Some of the participating faculty found the ISLOs provided a context to break down the assignments into manageable learning components.
- Faculty recognized ISLOs demonstrated that there was a systematic approach to building the skills necessary to complete assignments.
- As a result of their new metacognitive awareness of core learning skills, students had improved on their awareness, understanding, and use of the ISLO core learning skills. This was an incidental result, and we both assumed there would be some improvement and that the semester-long awareness campaign was only the beginning of core learning skills acquisition by students.
Implications

From presentations and discussions in CTL, we have been looking at growing-mind theory and other pedagogical insights in learning theory. It has always been, but is coming again into focus, that stress is one of the main barriers to learning (and now brain science is showing how stress-produced adrenelin prevents neural linking). In this project, the teachers observed lower stress levels in the classroom setting, and this might be attributable to the trust-building, emerging hopefulness, and disappearing guilt (over underpreparedness) resulting from the teacher helping the students with their learning skills.

The awareness of the existence, deficiency, and need for reclaiming of core learning skills also gives meaning to the learning project: it makes it personal, real, contextualized, universal, active, and proactive. The paralyzing passivity of so many students in the face of learning can be turned into proactive identification and management of the parameters of the learning process. The thinking processes needed for citizenship, parenthood, careers, and personal health management are all extensions and variations of the core learning skills engaged with in school.

And finally, actively engaging in understanding and learning core learning skills represents an experience of the six primary factors for student success: feeling directed, focused, nurtured, engaged, connected, and valued.
Appendix 1: Group Documents

Preparation Document
Initial Project Invitation
Talking Points
Survey Template
Assignment

Preparation Document

Dear Core Learning Skills Faculty Inquiry Group

Attached are 3 documents important for our Fall Core Learning Skills class project:

1 A description of the Pilot Project
2 Possible Talking Points
3 A list of core learning skills (for all 6 ISLOs), with corresponding survey questions

The Pilot Project description outlines your expected participation, listing semester-by-semester goals and stipend compensation.

The Talking Points are a brief summary of the project’s intent that might be of help when you are preparing your talk to students. Of course, you can use your own words to begin this conversation.

For the survey you administer to your students, you will select one or more ISLOs with its (their) core learning skills and survey questions, and use the examples given for the questions (or your own examples). The survey is part of the semester Faculty Inquiry Group project. That project may also have a post-survey but will at least involve a class assignment as a follow-up exercise to the pre-survey.

There is a workshop scheduled on the Friday of in-service that will introduce this pilot project to the faculty. Please try to attend this. We have also set up a pre-semester meeting scheduled for Thursday afternoon of in-service from 4-5 PM (after last workshop) in room CC-226. At the meeting we will go over the structure and timelines of the project and help everyone get ready for the semester.

Patrick Foster
Mark Ferrer
Committee for Teaching and Learning

Initial Project Invitation
Initial Project Invitation

Faculty Inquiry Group: Core Learning Skills and Pilot Survey Project (2014-15)

Purpose of the Pilot Project

The Academic Senate charged Committee on Teaching and Learning to review the Institutional Student Learning Outcomes (ISLO). The Core Learning Skills and Pilot Survey Project supports faculty in their related efforts to identify, assess and evaluate strategies aimed to increase student motivation and engagement, to address underpreparedness, and to make the relevance of the college’s core learning expectations clear to students. A major objective of the initiative is to help us teach students to master the core skills set out in our GEs/ISLOs, skills needed for academic success, for career achievement, and for lifelong learning.

Expectations of Faculty and Compensation for those Participating in the Pilot Project

Faculty involved in this Core Learning Skills and Pilot Survey Project will be participating in a Faculty Inquiry Group. Participants will receive a stipend in return for which they will be asked to complete the following during the 2014-15 academic year:

2014 Fall Semester

Primary Goal: Each member of the Faculty Inquiry Group will select one or more ISLOs on which to focus for the term and develop instructional materials designed to help his/her students master its competencies.

Start of the Semester

Survey: To determine what students know and don’t know, can and can’t do, participating faculty will administer a survey during the first week of class asking students to assess their ability to perform each of the competencies associated with the chosen ISLO(s).

Talking Points: To prepare students for this self-assessment, project faculty will first go over some talking points. These points were developed by the faculty initiating this project to facilitate classroom conversation about the relevance of SBCC’s core learning skills and the necessity for students to be committed to their mastery and to their own educations. In large part, this initial discussion asks students to discuss the need to acquire these competencies in order to achieve their educational and career objectives.

Students will be involved across the semester, through the survey and follow-up activities, in a reflective analysis of their engagement and preparation. The talking points open that dialog.

During the Semester

Within three weeks after the survey has been conducted, faculty will develop and give an assignment to assess their students’ command of the competency skills surveyed. Recommend faculty will compare their assessments with student self-assessments, proposing to each student a plan for next steps based on these assessment results.

The Faculty Inquiry Group participants will meet once a month in the Fall to discuss the approaches they are taking to engage students and to deepen the dialog. They will share the materials they have developed, and the assignment
they used to determine levels of student ISLO competency performance, going over their results together and getting feedback to help them improve what they have done and better prepare for next steps. Before the end of the semester faculty will give a post-survey.

**End of the Fall Semester**

Participants will write a final report reflecting on the outcomes of their project work and making recommendation for project improvements to be implemented in the Spring term. Final reports will be shared with the Committee on Teaching and Learning for discussion.

**Winter Intersession Workshop, January, 2015:**

Project faculty will be invited to take part in a January 2015 intersession workshop. During it they will identify the Fall 2014 assignments and activities that had the greatest impact on student learning. They will share post-survey results, and draw on lessons learned to make recommendations for improvements in the Spring project. Participants will consider as well the Spring use of directed learning activities (DLAs), links to supplemental learning materials, referrals to tutoring and/or the Writing Center, assigning their students to enroll in late start noncredit core skills courses, or other interventions. These tools were designed to help teachers enhance student mastery of core learning competencies without their having to become learning skills specialists themselves, a role for which most have not received any training.

**Expectations for the 2015 Spring Semester**

1. Each pilot project faculty member will, during the first week of instruction, cover the survey talking points and distribute/collect the student core learning skills self-assessment survey.
2. Pilot faculty will meet once a month with other project members to share what they learned from the survey results and subsequent discussions with their students. They will assess how well the interventions they implemented contributed to student learning of the core competencies they selected for study.
3. They will administer the survey again at the end of the term to assess the degree to which students report having made progress in acquiring the core learning skills taught in the class.
4. Participants will write a final report summarizing what they learned in the pilot project and make recommendations for improving the process they put in place in the spring to help students acquire their targeted core learning competencies.
5. All will attend a follow-up meeting in the summer to discuss what was learned and to recommend steps for institutionalizing this project.
Talking Points

Talking Points for Survey and Class Discussion of ISLOs/CSLOs

Student Talking Points

1 Course Student Learning Outcomes (CSLOs) and Institutional Student Learning Outcomes (ISLOs) measure the core learning skills you need in order to be successful here at SBCC, to transfer, and to get a job; they are based on input from transfer institutions and employers. It is our promise as an educational institution that, if you do your fair share as an SBCC student, we will contribute all we have to guarantee that you will master these skills.

2 To do well in this course, you will have to learn its content skills/knowledge and the college’s core learning skills as set out in its general education requirements. These are the core learning skills [list them] you will need, and this is how the course is designed to help you learn these skills [explain].

3 Knowing what your school and its individual classes expect of you will help you learn the skills you need for success, transfer and a career.

4 I will survey you (or talk with you) and discuss these core learning skills with you, explaining how and why our requiring and teaching them will help you.

5 We are asking you to answer these questions on a pre- and post-survey to find out what you know and can do at the start and then again at the end of the course. Understanding what you do and don't yet know, can and can't yet do, at the start of the class will help us improve instruction and address your needs during the course itself. Asking for your assessment of what you have learned at the end will help us continuously improve instruction. This survey has nothing to do with your grade in this class, so it is to your benefit to answer as honestly as you can.

Teacher Talking Points

1 The skills included under each ISLO are the skills educators and employers want students to learn. (http://www.aacu.org/leap/)

2 These skills are better learned in class if students see their universality (across disciplines, throughout life) and importance (as skills for employment and for further schooling).

3 Involving students in reflecting on their participation and skill-needs will help them to take greater responsibility for their learning and to work to overcome their widely documented underpreparedness.*

4 Focusing inquiry and discussion on the core learning skills (ISLOs and CSLOs) required of students for success in your class, transfer, and the workplace will give them perspectives and motivate them to achieve something they value and know they can accomplish.

5 Aware of their own skills, students will be more articulate about them for job interviews and on other future profiles.

Survey Questions and Examples for ISLOs

I. Critical Thinking, Problem Solving, Creative Thinking

Students will demonstrate the ability to define issues, problems or questions and to collect relevant information in response to a question or issue. Students will analyze and, using evidence and reasoning to support them, draw valid conclusions from statements, images, data, and other forms of proof. They will synthesize solutions and assess the implications and consequences of their conclusions.

1. Define the issues, problems, or questions they have been asked or have chosen to address.

1.1 Define the issues, problems, or questions they have been asked or have chosen to address.

1.1.Q1 How well can you define the issues that need to be addressed in order to answer a specific question or solve a particular problem?

For instance, if you were assigned a paper on climate change, would you be able to define several key issues that needed to be covered?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

1.2 Collect and analyze data and relevant information including that derived from different types of information sources and alternative approaches to information/data gathering (e.g., scholarly article, blog, wiki, online community).

1.2.Q1 In a world where you are flooded with information, how well can you select relevant information in order to answer a question or solve a problem?

For instance, if you were asked to investigate humanity’s impact on climate change, would you be able to select information relevant to that inquiry?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

1.3 Distinguish facts from opinions and biases.

1.3.Q1 When presented with information, how well do you think you can distinguish facts from opinions and biases?

For instance, you have been presented with a report on the effect of fracking on the environment sponsored by a major oil company. How well do you think you could separate the facts from the opinions presented in the report?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able
1.4 Draw insights from multiple reliable sources of information to create solutions to problems and identify possible outcomes of those solutions.

1.4.Q1 Can you propose a solution to a problem using relevant information drawn from multiple reliable sources?

For example, using many data sources, can you come up with a plan to reduce your usage of electricity?

__I can use, without difficulty, multiple sources of information to form a solution
__I can do so with some difficulty
__I am not sure I can do so without help
__I can’t use multiple sources of information to form a solution

1.4.Q2 Can you identify the positive and/or negative outcomes that may result from your solutions to problems?

Once you have your plan to reduce your electrical usage can you identify positive or negative consequences if this plan was applied to everybody?

__I can identify, without difficulty, the consequences that may result from my solutions
__I can do so with some difficulty
__I am not sure I can do so without help
__I can’t identify the consequences that may result from my solutions

1.5 Use valid evidence and sound reasoning to generate and/or support conclusions drawn about problems, questions, or issues.

1.5.Q1 Can you use sound reasoning to support a conclusion?

You are assigned a paper that argues that humans have an impact on climate change. How well do you think you can use convincing evidence and solid logic to support your argument?

__I can use sound reasoning to support a conclusion
__I can do so with some difficulty
__I am not sure I can do so without help
__I can’t use sound reasoning to support a conclusion
II. Communication

Students will demonstrate successful communication skills in reading, writing, listening, speaking and exchanging information, ideas, findings or opinions across disciplines and for varied audiences.

2.1 Reading
Read, comprehend, interpret, and construct meaning from texts.

2.1.Q1 How well can you read and understand your textbook(s)?

__Very Well__ __Fairly Well__ __Not well at all__ __Not Able__

2.2 Writing
Employ the conventions of standard English to create original texts that clearly communicate ideas and information.

2.2.Q1 Can you write a clear, grammatically correct sentence?

__Always__ __Generally__ __Sometimes__ __Never sure__ __Don’t know how__

2.2.Q2 Can you communicate an idea clearly in writing?

__Always__ __Generally__ __Sometimes__ __Never sure__ __Don’t know how__

2.3 Speaking
Orally communicate clear, well-founded and developed ideas in an organized manner.

2.3.Q1 How well can you organize ideas and communicate them orally?

__Very Well__ __Fairly Well__ __Not well at all__ __Not Able__

2.4 Listening
Receive, interpret, attend and respond to verbal and nonverbal communication.

2.4.Q1 Are you an active and effective listener?

__Always__ __Generally__ __Sometimes__ __Never sure__ __Don’t know how__

2.4.Q2 How well do you recognize non-verbal clues such as distracted attention, lack of eye contact, tense body language?

__Very Well__ __Fairly Well__ __Not well at all__ __Not Able__

2.5 Visualizing
Recognize and interpret, in an organized manner, images, diagrams, graphic displays, film, video and other forms of observable communication.

2.5.Q1 How well are you able to understand visual images such as diagrams, graphic displays, film, and/or video?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

2.5.Q2 How well do you follow the action, plot, placement/blocking of character, and the use of place, color, and shadow in film and/or video?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

III. Quantitative Analysis and Scientific Reasoning

Students will be able to analyze, estimate, use, and evaluate quantitative information using words, data, graphs, and symbols; and apply scientific methods to questions regarding observable natural, physical and social phenomena.

3.1 Apply quantitative skills to the interpretation of data.

3.1.Q1 How comfortable are you using numbers and statistics to draw conclusions?

__Very Comfortable  __ Fairly Comfortable  __ Not Comfortable  __ Not Able

3.1.Q2 How well can you recognize patterns in a collection of numbers?

For example, given a list of daily temperatures for a three-day period, can you determine a relationship between the time of day and highest daily temperature?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

3.1.Q3 How well can you find the median using a table of data

For example, given a table of housing prices in Santa Barbara, can you figure out the median housing price?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

3.2 Use graphs, symbols and mathematical relationships to describe observations and to establish sound arguments supported by accurate quantitative evidence.

3.2.Q1 How well can you look at a graph and interpret its meaning?
3.2 Q2 How well can you create a graph to present information?

3.2 Q3 How well can you look at a mathematical equation and determine the relationship between the variables it is describing?

3.2 Q4 Given a relationship between variables, how well do you feel you can write down the equation describing that relationship?

3.3 Apply mathematical concepts to solve problems.

3.3 Q1 How well can you translate a word problem into a mathematical equation?

3.3 Q2 How well can you solve a mathematical equation (e.g., plug numbers into a given equation)?

3.4 Employ the scientific method to form and to test theories, explanations and hypotheses.

3.4 Q1 How well can you take an experimental result and form a hypothesis explaining how the outcome was produced (i.e., take results of an experiment and explain what happened)?

3.4 Q2 How well can you assess the validity of an experiment?

3.5 Distinguish scientific theory from conjecture and/or speculation.

3.5 Q1 How well can you judge whether or not a scientific claim is true?
3.5.Q2 How well can you differentiate between a scientific theory and speculation?

__Very Well__  __Fairly Well__  __Not well at all__  __Not Able__

3.5.Q3 Can you recognize and explain relationships between sets of scientific data?

For example, can you determine a relationship between maximum temperatures and time of day over the last three days?

__I can explain relationships between sets of scientific data__
__I can do so with some difficulty__
__I am not sure I can do so without help__
__I can’t explain relationships between sets of scientific data__

IV. Social, Cultural, Environmental, and Aesthetic Perspectives

Students will be able to demonstrate knowledge of significant social, cultural, environmental, and aesthetic perspectives.

4.1 Describe how the interaction among social, economic, political, cultural, environmental and historic events affects the individual, society and the environment.

4.1.Q1 How well can you describe the interaction among social, economic, political, environmental, and historical events?

__Very Well__  __Fairly Well__  __Not well at all__  __Not Able__

4.1.Q2 How well can you define the term "culture"?

__Very Well__  __Fairly Well__  __Not well at all__  __Not Able__

4.2 Explain how culture influences different beliefs, practices and peoples.

4.2.Q1 How aware are you of cultures other than your own?

__Very Aware__  __Fairly Aware__  __Not very Aware__  __Not aware at all__

OR

4.2.Q1 How much do you know about cultures other than your own?

__I know a great deal about other cultures__
__I have some knowledge of other cultures__
__I know little about other cultures__
__I know nothing about other cultures__

4.2.Q2 To what extent do you understand how different cultures produce different beliefs, practices, and behaviors in different peoples?
4.3 Recognize the contributions of fine, literary, and performing arts in influencing the human experience.

4.3.Q1 To what extent have the fine arts (e.g., painting, sculpture), literary arts (e.g., novel, poetry, short story), and/or performing arts (e.g., plays, concerts, dance) influenced your life?

__to a great extent  __to some extent  __to a little extent  __to no extent

4.3.Q2 Can you provide an example of how fine art, literature, music, or drama has reshaped the human experience?

For example, how the Beatles' music influenced cultural change in the 1960s.

Or

4.3.Q2 Can you explain how fine art, literature, music, or drama has reshaped the human experience?

__I can explain how art has shaped human experience

__I can explain to some extent how art has shaped human experience

__I can give a very limited explanation of how art has shaped human experience

__I can't how art has shaped human experience

4.4 Recognize the social and ethical responsibilities of the individual in society, explaining the value of choosing to interact with respect in differing cultural contexts.

4.4.Q1 How strongly do you feel that the individual has social and ethical responsibilities?

__Very strongly  __Somewhat strongly  __Not very strongly  __Not strongly at all

4.4.Q2 How valuable do you find it to experience different cultures?

__Very valuable  __Somewhat valuable  __Not very valuable  __Not valuable at all

4.4.Q3 How well do you interact with people from cultures different from your own?

__Very Well  __Fairly Well  __Not well at all  __Not Able

V. Information, Technology, and Media Literacy

Students will be able to locate, evaluate, synthesize and use multiple forms of information employing a range of technologies.

5.1 Select and evaluate the accuracy, credibility, and relevance of multiple formats and sources of information.

5.1.Q1 How well do you think you can evaluate the accuracy, credibility, and relevance of different types of information?
5.2 Use technology effectively to organize, manage, integrate, create, and communicate information and ideas.

5.2.Q1 How well do you use technology to organize, create, and communicate information and ideas?

__Very Well    __ Fairly Well    __ Not well at all    __ Not Able

5.3 Critically evaluate how information is communicated visually.

5.3.Q1 How well can you determine how the media influences our opinions and beliefs?

__Very Well    __ Fairly Well    __ Not well at all    __ Not Able

5.4 Identify the legal, ethical, social, and economic rights and responsibilities associated with the use of media.

5.4.Q1 How well do you understand what is legal and ethical in your use of visual, print and social media?

__Very Well    __ Fairly Well    __ Not well at all    __ Not Able

VI. Personal, Academic, and Career Development

Students will be able to assess their own knowledge, skills, and abilities; set personal, educational, and career goals; work independently and in group settings; and identify lifestyle choices that promote self-reliance and physical, mental, and social health.

6.1 Develop, implement, and evaluate progress towards achieving personal, academic, career and lifelong learning goals

6.1.Q1 Have you ( I ) set a personal goal and made progress towards achieving it?

__I have set a personal goal and made significant progress in achieving it
__I have set a personal goal and made some progress
__I have begun to set a goal but have made little progress in achieving it
__I haven’t set a personal goal

6.1.Q2 Have you ( I ) set an academic goal and made progress towards achieving it?

__I have set an academic goal and made significant progress in achieving it
__I have set an academic goal and made some progress
I have begun to set an academic goal but have made little progress in achieving it.

I haven’t set an academic goal

6.1.Q3 Have you (I) set a career goal and made progress towards achieving it?

I have set a career goal and made significant progress in achieving it.

I have set a career goal and made some progress.

I have begun to set a career goal but have made little progress in achieving it.

I haven’t set a career goal.

6.1.Q4 Do you (I) believe you will continue to learn throughout your life?

Very much so.

to some degree

Not really.

Not at all.

6.1.Q4 Do you (I) consistently make choices that benefit your physical and mental health?

Consistently.

Frequently.

Rarely.

Never.

6.2 Demonstrate personal responsibility for choices, actions and consequences, including but not limited to, attending classes, being punctual and meeting deadlines.

6.2.Q1 Do I understand that my personal choices affect my success in life?

I fully understand that my personal choices affect my success in life.

I don’t fully understand how my personal choices affect my success in life.

I don’t think my personal choices have much affect on my success in life.

I don’t believe my personal choices have any affect on my success in life.

6.2.Q2 Do I attend class regularly?

Always.

Frequently.

Rarely.

Never.

6.2.Q3 Do I complete and turn in assignments on time?

Always.

Frequently.

Rarely.

Never.

6.2.Q4 Do I appropriately prioritize my personal and academic responsibilities?

Always.

Frequently.

Rarely.

Never.

6.3 Work effectively in a group setting, recognizing and respecting cultural and personal/individual differences, and observing academic, professional standards of civil engagement.

6.3.Q1 How well do I respect cultural and individual differences in group settings (work, social and private)?
6.3.Q2 In school and at work, how well do I observe academic and professional standards of civic engagement?

__Very Well  __ Fairly Well  __ Not well at all  __ Not Able

6.4 Identify and use appropriate (federal, state, community, individual, instructional, and student support) resources to solve a problem or find an answer?

6.4.Q1 How effectively do I use the private, campus, state, and federal resources available to help me solve problems or find answers?

__Very Effectively  __ Fairly Effectively  __ Not very Effectively  __ Not Effectively
Assignment

Core Learning Pilot Study Assignments and Study (2nd meeting follow-up)

I Between-meetings assignment
   A Upload all documents you want to share (surveys, assignments, discussion handouts, etc.) to Google Docs (Core Learning Pilot Study file).

   B Begin (if you haven’t already) a journal documenting the following:
      1 Project actions (surveys, assignments, with dates, week, classes, etc.)
      2 Successes
      3 Failures (or non-successes)
      4 Unforeseen consequences of actions (surprises)
      5 Changes in plans
      6 Educational changes in class, teacher, or students

II Ideas from last meeting
   1 Student involvement in his/her own learning (already!)
   2 Survey/assignment/discussion and underpreparedness
   3 Survey/assignment/discussion and future learning
   4 Learning as process (skills) rather than (or at the base) of content (facts)
   5 Improved student attitude toward learning/classroom atmosphere/student-teacher relationship
   6 Building trust as “we want you to succeed with this project”
   7 Meta-meta-cognition: students beginning to evaluate ISLOs/core skills for objectivity/relevance/accuracy

III Project Comparative Categories (1st draft)
   1 Class preparation (initial introduction of project, survey, assignment; formal link to ISLOs/CSLOs/grades vs SLOs; talking points (from initial list or not).)
   2 Survey (student name? including ISLOs, Heading example assignment, common/field specific survey questions, common/field adapted examples, scoring method, # of ISLOs chosen, # of core learning skills chosen, tally of survey responses
   3 Follow-up Assignment (test, paper, when given in relation to survey, format, introduction, tally of assignment answers
   4 Follow-up Discussion of survey/assignment differences (clarity of ISLO, survey questions, examples, verbal introduction; objective status of skills; possible explanation of differences.
   5 Post Survey (introduction, how compare surveys, how explain differences)
   6 Final follow-up Discussion
Appendix 2: Individual Reports

Patrick Foster, Construction Technology

Construction Technology 122 Green Building Pilot Project

This pilot study in a Green Building class was created to introduce ISLO core learning skills (ISLO #1) in such a way as to 1) make the student aware of their importance in succeeding in Community College, further schooling, and job and career; 2) make the student aware of his/her current level of mastery of these skills; 3) make the student aware of their application in class assignments (homework, tests, and papers); 4) make the student aware that their level of mastery can grow with awareness and use; and 5) make the student aware that the classroom will be a place where the teacher and students together will work on awareness and mastery of these skills.

The sequence of class activity for this project was as follows:

1. Teacher introduction and class discussion
2. Pre-survey for class (student ranking of skills)
3. Quiz 1
4. Teacher ranking of skills (on basis of quiz 1)
5. Class discussion of results (teacher ranking/student ranking comparison)
6. Progression of course
7. Post-survey for class (same as pre-survey)
8. Quiz 2
9. Teacher ranking of skills (on basis of quiz 2)
10. Final class discussion of results and project

Conclusions:

The student rankings on the pre-survey were closer to the teacher rankings than was anticipated. The class discussion of what differences there were and how valid these comparisons were was good (see separate sheet on this first discussion).

The student rankings on the post-survey went both up and down from the rankings on the pre-survey. The teacher rankings still sometimes disagreed with student rankings. The final class discussion of results and overall project was also good (see separate sheet on this discussion).

Statistically, there were not enough test cases (6) even if their results could be interpreted reliably. Since there will always be a gap between what the students actually know and how they score on surveys and tests—because of test-taking issues (adequacy of test questions, normalcy of student mental state at time, etc.)—a valid interpretation of scores is problematic. (Of course this holds for all testing, and we generally assume these conditions will statistically even out, not adversely affecting comparative ranking.)

So, for this particular classroom study, our conclusions must follow the anecdotal experience of the teacher. Based on discussions, students were 1) aware of ISLO #1 and its core learning skills, 2) aware of difference between survey and quiz results, 3) aware of change in skills over semester, 4) aware that core learning skills can improve through student awareness and application.
In terms of the five aims in the introduction above, from the comments of many of them, the students seemed to both understand and support the project purpose. From quiz and final exam results, I felt that many of the students (especially the ones that were able to document all steps of the project—their surveys and quizzes attached) grew in their awareness and mastery of the core learning skills.

There are mechanics I would change with the project. I would now repeat the introduction as is but use a longer, more specific survey, with more one-to-one mapping of core learning skills. I would then not use non-graded survey-matching quizzes, but rather tailor all the assignments throughout the course (homework, quizzes, tests, written assignments) to the core learning skills. This does not mean all the items (questions, topic points) would have to involve the learning skills, for there are many content questions that just test understanding of construction terms or processes. But all the questions that require critical or creative thinking would test one of the ISLO #1 skills. This would integrate the core learning skills into the actual content work of the class.

I think I would also have them write a final summary of how aware they became of the core skills and how they were able to use them to answer questions on assignments.
Name ______________________________________

CT 122 PreClass Survey
Critical Thinking, Problem Solving, Creative Thinking

Sample Assignment: *Describe the environmental issues involved in “green” material.*

1 How well can you define the issues that need to be addressed in order to answer a specific question or solve a particular problem?

(For instance, in the above assignment on green material, would you be able to define why green materials might be an environmental problem?)

__Very Well  __Fairly Well  __Not Well at All  __Not Able

2 In a world where you are flooded with information, how well can you select relevant information in order to answer a question or solve a problem?

(For example, to answer the green material assignment, would you know where to go for relevant information?)

__Very Well  __Fairly Well  __Not Well at All  __Not Able

3 When presented with information, how well do you think you can distinguish facts from opinions and biases?

(For instance, would green product labels be fact or bias? How about the environmental reports about the products?)

__Very Well  __Fairly Well  __Not Well at All  __Not Able
4 Can you propose a solution to a problem using relevant information drawn from multiple reliable sources?

(For example, will negative environmental issues associated with a certain green material cause you to completely stop using that product?)

I can use, without difficulty, multiple sources of information to form a solution
I can do so with some difficulty
I am not sure I can do so without help
I can’t use multiple sources of information to form a solution

4b Can you identify the positive and/or negative outcomes that may result from your solutions to problems?

(For example, will stopping using that product also have negative results for you?)

I can identify, without difficulty, the consequences that may result from my solutions
I can do so with some difficulty
I am not sure I can do so without help
I can’t identify the consequences that may result from solutions

5 Can you use sound reasoning to support a conclusion?

(For example, could you give good reasons to come to a conclusion about a specific green product?)

I can use sound reasoning to support a conclusion
I can do so with some difficulty
I am not sure I can do so without help
I can’t use sound reasoning to support a conclusion
Write a paragraph for each answer, and be sure to answer all parts of the question:

1. How will heavy rains impact a house site? And what can be done to correct any problems?

2. If you wanted to plant only native plants in your yard, where would you find out information on the varieties of native plants, how well they withstand drought conditions, and where to get them?

3. When running gray water to your orchard from your laundry, how well do you trust the process to not poison the fruit on your trees? And why?

4. They say the chemicals you use on your lawn (fertilizers, herbicides, etc.) make their way to the ocean. How could this happen and how do you know if it is true?
5 During the current drought, if you suspect your shower head is using too much water, what several sources of information can you find to guide you in assessing current use, recommended usage, and replacing the head if necessary?

6 What are the positive and negative outcomes of using only native plants?

7 If you’ve ever used a low-flush toilet, what are the advantages and problems with them?

8 Why are native plants advised to be used in Santa Barbara?
Post Quiz #1 Discussion
(Building Green class: Fall ’14; Instructor: Patrick Foster)

A week after the initial Core Learning Skills Survey, a follow-up quiz was given that asked content questions parallel to the survey. The teacher evaluated each quiz and entered a new score on the original survey page below (and to the left or right of) the student self-score. The class then talked about any differences between student self-evaluation and teacher evaluation on the survey.

The teacher explained what he did, and then qualified the results as confined to one quiz the questions of which the student may or may not have understood, and which may or may not have tested the survey questions accurately.

The students responded in various ways. Some felt the teacher’s score may not accurately represent their mastery of the particular Core Learning skill, and the teacher explained that that might indeed be true, but that the exercise was to get the students to think about their use of the skills and the student might know better about his/her own learning skills.

The teacher was surprised at how close the teacher evaluation was to the student self-evaluation, and concluded this might be due to the accurate self-evaluation of this group of students.

The teacher then went on to talk about the overall learning weakness that the survey/quiz exercise seemed to indicate about all the participants. And that was not vetting the information that is used to choose products or processes or make decisions in building, accepting information (that might be opinionated or biased or false) without enough evidence. One of the students gave the example of having to discuss products or services with clients and needing to back up choices with acceptable evidence. The teacher added that especially in the field of sustainable building where new products come on line constantly and new building science dictates new ways of building, tradespersons need to know how to evaluate things (including finding reliable evidence).

One student said that many everyday building decisions did not need that kind of scrutiny, and the teacher agreed saying that the evidence might range from personal anecdotal experience to state building code requirements to internet material analyses (Material Safety Data Sheets), and that understanding what degree of evidence each situation requires is part of the skill. The teacher added that this skill of using appropriate evidence to support conclusions and choices is a skill needed throughout life and not just in the building realm.

A student asked why the teacher was doing this project. The teacher responded that many students were coming to SBCC underprepared to do the school work required, and this project is an experiment to see if teachers can help students pinpoint where they need help in learning and applying such thinking skills, and to help them develop strategies to do that. The project was designed to help students succeed.

When asked if the results of the exercise were of value, the teacher said that what was of value was the discussion that we were then having—the involvement of the students in their own learning skills. The classroom ambience seemed one of appreciation rather than combativeness.

Post-Quiz 2 Discussion

The teacher went over the final exam with class (pointing out which questions corresponded with which core learning skills on their post-survey). The teacher then passed out Quiz 2 (taken the week before) and pointed out the ranking he gave (a circle under the survey question ranking) on each student post survey. The class then discussed the differences in student/teacher ranking; the movement, up or down, of ranking from pre-survey to post-survey; and the growth, if any, of skill awareness and use. The teacher complimented the class on their increased awareness of core learning skills and their improvement in critical thinking.
Sample Assignment: *Describe the environmental issues involved in “green” material.*

1. How well can you define the issues that need to be addressed in order to answer a specific question or solve a particular problem?
   *(For instance, in the above assignment on green material, would you be able to define why green materials might be an environmental problem?)*

<table>
<thead>
<tr>
<th>Very Well</th>
<th>Fairly Well</th>
<th>Not Well at All</th>
<th>Not Able</th>
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<tr>
<td>1</td>
<td>5</td>
<td>3</td>
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2. In a world where you are flooded with information, how well can you select relevant information in order to answer a question or solve a problem?
   *(For example, to answer the green material assignment, would you know where to go for relevant information?)*

<table>
<thead>
<tr>
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<th>Fairly Well</th>
<th>Not Well at All</th>
<th>Not Able</th>
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<tr>
<td>3</td>
<td>6</td>
<td>1</td>
<td>0</td>
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3. When presented with information, how well do you think you can distinguish facts from opinions and biases?
   *(For instance, would green product labels be fact or bias? How about the environmental reports about the products?)*

<table>
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<th>Not Well at All</th>
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<td>2</td>
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</table>
Sample Assignment:  *Describe the environmental issues involved in “green” material.*

4 Can you propose a solution to a problem using relevant information drawn from multiple reliable sources?

(For example, will negative environmental issues associated with a certain green material cause you to completely stop using that product?)

| 5 | I can use, without difficulty, multiple sources of information to form a solution |
| 4 | I can do so with some difficulty |
| 3 | I am not sure I can do so without help |
| 0 | I can’t use multiple sources of information to form a solution |

4b Can you identify the positive and/or negative outcomes that may result from your solutions to problems?

(For example, will stopping using that product also have negative results for you?)

| 5 | I can identify, without difficulty, the consequences that may result from my solutions |
| 4 | I can do so with some difficulty |
| 3 | I am not sure I can do so without help |
| 0 | I can’t identify the consequences that may result from solutions |

5 Can you use sound reasoning to support a conclusion?

(For example, could you give good reasons to come to a conclusion about a specific green product?)

| 3 | I can use sound reasoning to support a conclusion |
| 4 | I can do so with some difficulty |
| 3 | I am not sure I can do so without help |
| 0 | I can’t use sound reasoning to support a conclusion |
Post Survey Tally

CT 122 Post Survey
Critical Thinking, Problem Solving, Creative Thinking

Sample Assignment: *Describe the environmental issues involved in “green” material.*

1 How well can you define the issues that need to be addressed in order to answer a specific question or solve a particular problem?

*(For instance, in the above assignment on green material, would you be able to define why green materials might be an environmental problem?)*

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2 In a world where you are flooded with information, how well can you select relevant information in order to answer a question or solve a problem?

*(For example, to answer the green material assignment, would you know where to go for relevant information?)*

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<td>2</td>
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*(For instance, would green product labels be fact or bias? How about the environmental reports about the products?)*

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Sample Assignment:  *Describe the environmental issues involved in “green” material.*

**4** Can you propose a solution to a problem using relevant information drawn from multiple reliable sources?

(For example, will negative environmental issues associated with a certain green material cause you to completely stop using that product?)

2__ I can use, without difficulty, multiple sources of information to form a solution
2__ I can do so with some difficulty
0__ I am not sure I can do so without help
0__ I can’t use multiple sources of information to form a solution

**4b** Can you identify the positive and/or negative outcomes that may result from your solutions to problems?

(For example, will stopping using that product also have negative results for you?)

3__ I can identify, without difficulty, the consequences that may result from my solutions
1__ I can do so with some difficulty
0__ I am not sure I can do so without help
0__ I can’t identify the consequences that may result from solutions

**5** Can you use sound reasoning to support a conclusion?

(For example, could you give good reasons to come to a conclusion about a specific green product?)

4__ I can use sound reasoning to support a conclusion
0__ I can do so with some difficulty
0__ I am not sure I can do so without help
0__ I can’t use sound reasoning to support a conclusion
Melanie Eckford-Prossor, Honors English

Overview:
For my project last semester, I used ISLO #1 on Critical Thinking, specifically choosing to focus on only one of the elements within ISLO 1, the element about questions. I chose this ISLO because in English the ISLO addresses how and if students can move from a question to a strategy, which includes asking them to contemplate how to address the question. In my class, I ask students not to use a template for their writing, so if they can define the issue or problem they’ve selected, their answers will begin not only to address content, but will also suggest a structure for the essay.

I asked the class of Honors students three questions: the first question is the question as phrased in the ISLO. As one of my students commented, “This question is very broad, based on what your professor is speaking or teaching upon.” Thus, the two questions following the broad ISLO question are field-specific, meaning that they interpret the general question for specific events that a student in an English 110H class might encounter.

The goal of this project as a whole is for students to see that their education asks them to use certain skills again and again. Critical thinking and the ability to think through issues, problems, and questions will happen across all of their courses. Yes, different fields might interpret the questions differently, but they must grapple with questions, and those questions have implication for structure/organization/scale of a paper as well as with finding credible sources to support their points.

General:
1. Can you define the issues, problems or questions students have been asked or have chosen to address?
   A. Yes, very well  B. Well  C. Ok  D. Not very well
   Start of the semester: A: 2, B: 10, C: 5, D: 1
   End of the semester: A: 4, B: 10, C: 2, D: 0

Field-Specific Questions:
2. In a 110H paper, can you use questions to focus the scale and scope of your paper?
   Start of the semester: A: 1, B: 5, C: 7, D: 4
   End of the semester: A: 4, B: 5, C: 7, D: 0

3. In a paper using analysis, can you find credible research to help you focus on a topic?
   Start of the semester: A: 3, B: 6, C: 6, D: 2
   End of the semester: A: 7, B: 8, C: 1, D: 0

Findings:
The most improvement was seen in question 3. To achieve this and to achieve improvement in question 2, we regularly discussed the questions they would use to limit the scale of their papers. We would compare
questions, looking at the kind of focus involved in responding to those questions. This did not happen at one specific moment; it was a guiding principle for the course. But question 2 is also the most difficult of the questions, and the most crucial, in my mind. If they can narrow a question, they can use it to limit the scale of the paper and thus they can deepen the analysis of the question. But looking in detail at an issue often scares students—they worry they will run out of material to discuss, which accounts for why they sometimes choose very broad topics or approaches to those topics.

Question 3 showed so much improvement, I think, because their third paper asked them to build a knowledge bank. The knowledge in the bank came from students’ questions about the novel we had read. Once they had a group of questions, they had to think about how those questions could be organized and classified. From the classification of their questions they then had to choose their key areas of research. The class divided into teams, based on their interests in specific questions/fields. They uploaded their research to Moodle 2 as a source for the class as a whole. While they could add more of their own research, they were required to use some of the research in the bank, forcing them to evaluate the usefulness of the information. Perhaps just as important was their recognition that certain material could fall into a few questions, but that the question itself would shape the kind of research they would find. This strikes me as a very useful insight: broad topics are only so useful. Approaching a broad topic from a series of specific questions directs the nature of the research.

Honors students tend to be hard on themselves, or, in a world without grade inflation, they tend to see their abilities accurately, which can be seen in the starting positions. There were few As and a number of Ds. By the end of the course, some of the As had moved up, but no one felt that he or she could not address the issues.

Take-Away:
I like the emphasis on the one question, but grappling with the ISLO in terms of trying to teach it, I am starting to think that we could simplify the ISLOs into something much more elemental—and much more difficult. We are really asking them if they can think (ISLO 1), if they can research, if they can read, write, and listen, if they can work with numbers and quantitative information, and so on.
Thus, I would strip the ISLOs down to their most elegant, simple form. Departments could work on their own field specific questions so that students begin to see that their skills transfer from class to class and that while approaches to a question might differ depending on the department, again and again, they are being asked and encouraged to want to think, to read, to write, to hypothesize, to examine, and to be creative in all of those endeavors. The “I” in the ISLO would be the school’s commitment, across all disciplines, to discuss, teach, and use the six elements.
ISLO 1 in History 103 Hybrid Fall 2014

First, I asked students to rate and record their competency in the ISLO skills according the generic examples designed in the summer workshop.

The results:
1.1: 14 very well, 15 fairly well, 1 not well at all, 0 not able
1.2: 13 very well, 14 fairly well, 3 not well at all, 0 not able
1.3: 15 very well, 15 fairly well, 0, 0
1.4: 9 I can use without difficulty, 15 I can do so with some difficulty, 6, I am not sure, 0 I can’t
1.5: 11 I can identify without difficulty, 15 I can do so with some difficulty, 4 I am not sure, 0 I can’t
1.6: 20 I can, 8 I can do so with some difficulty, 2 I am not sure, 0 I can’t

Next, I asked students to consider which ISLO’s applied to the skills required to complete the following assignment:

History 103 Hybrid Final Research Paper Assignment Description

Prompt: Analyze the relationship between religion and politics in one or more civilizations studied in History 103

Hint: This prompt does not ask a question or direct you to form an argument. However, a good way to think about your thesis is as the ANSWER to a specific question the prompt inspires you to consider as you read the textbook and the primary source documents. Your thesis will state your answer and argue how or why your answer is correct.

This is a sample of a good thesis written by a former student for another class. Please notice how specific the argument is and that the prompt is not restated in the thesis:

The historian Sima Qian falsely created the historical misconception that China’s first Emperor, King Zheng, ruthlessly suppressed Confucian ideology to gain favor with the ruling Han, when to the contrary, King Zheng used Confucian ideals to strengthen his reign, cultivate the loyalty of his subjects, and as principles to guide him as to how to lead his people.

Paper requirements:
1. Your research paper should be approximately 5, double spaced, pages long (1400-1600 words).
2. The introduction, outline, and structure of your paper should follow the guidelines provided in the Historical Skill Highlights. Your introduction must follow the introduction format described in the Historical Skill Highlights. Do not attempt to complete this paper without reviewing the Historical Skill Highlights. Make sure your introduction includes historical context, a thesis with a strong and specific historical argument, and methodology.
3. You are required to include an excerpt from a minimum of one primary source in your paper. The source must come from the complete document (cannot be from an excerpt of the document unless the excerpt is the complete version of all which exists of the document) and may not come from course
content. You may locate the complete source of an excerpted source in Mindtap. You must use, analyze, and cite the primary source in the paper.

4. You are required to include four scholarly secondary sources that you locate from outside the course work. You must analyze and cite all four scholarly secondary sources in the paper. Do not directly quote secondary source in your paper. Secondary source evidence should always be put into your own words.

5. You are required to include a bibliography at the end of the paper.

Paper submission special instructions:

1. Include the Turnitin.com submission code at the top of your paper.

2. Underline thesis

3. Identify which sources are primary source by placing an asterisk at the end of the citation in your bibliography and at the end of the citation in the text of your paper.

What I learned:

1. While most students believed themselves to be competent according to the generic examples, many questioned their competency levels when I pointed out how they applied to the assignment. I wish I had had the foresight to have students fill out a second Scantron when we applied the ISLOs to their assignment.

2. By framing the ISLO process as a way to both empower students to identify and universally apply the skills they learn in their SBCC classes, and as a way for faculty to best identify how we can provide our students with the essential skills, I reassured my students that I would provide support throughout the semester to build the skills necessary to complete the assignment.

3. The ISLO provided the context to both break down the assignment into manageable learning components and to demonstrate that there was a systematic approach to building the skills necessary to complete the assignment.

4. During the class discussion, I realized that I had difficulty determining exactly what each section of the ISLO meant, found parts of the ISLO to be redundant, and sometimes I had trouble figuring out how to apply aspects of the ISLO to specific aspects of the analysis I required of my students. If the ISLOs are difficult for me to understand, distinguish between, and apply, I know my students will be even more confused.

5. Thesis or hypothesis formation is an essential aspect of the analytical process left out of the ISLO. Forming a conclusion is not always the same thing as forming a thesis or hypothesis.
Kathy O’Connor, Physical Education

Student Survey

Name

Date

Course
- HE 101
- HE 102
- PD 140
- PE 148

VI. Personal, Academic, and Career Development

Students will be able to assess their own knowledge, skills, and abilities; set personal, educational, and career goals; work independently and in group settings; and identify lifestyle choices that promote self-reliance and physical, mental, and social health.

Develop, implement, and evaluate progress towards achieving personal, academic, career and lifelong learning goals

6.1.Q1 Have you set a personal goal and made progress towards achieving it?

☐ I have set a personal goal and made significant progress in achieving it
☐ I have set a personal goal and made some progress
☐ I have begun to set a goal but have made little progress in achieving it
☐ haven’t set a personal goal

6.1.Q2 Have you set an academic goal and made progress towards achieving it?

☐ I have set an academic goal and made significant progress in achieving it
☐ I have set an academic goal and made some progress
☐ I have begun to set an academic goal but have made little progress in achieving it
☐ I haven’t set an academic goal

6.1.Q3 Have you set a career goal and made progress towards achieving it?
I have set a career goal and made significant progress in achieving it

☐ I have set a career goal and made some progress

☐ I have begun to set a career goal but have made little progress in achieving it

☐ I haven’t set a career goal

6.1.Q4 Do you believe you will continue to learn throughout your life?

☐ Very much so ☐ to some degree ☐ Not really ☐ Not at all

Q4 Do you consistently make choices that benefit your physical and mental health?

☐ Consistently ☐ Frequently ☐ Rarely ☐ Never

Demonstrate personal responsibility for choices, actions and consequences, including but not limited to, attending classes, being punctual and meeting deadlines.

Q1 Do you understand that my personal choices affect my success in life?

☐ I fully understand that my personal choices affect my success in life

☐ I don’t fully understand how my personal choices affect my success in life

☐ I don’t think my personal choices have much affect on my success in life

☐ I don’t believe my personal choices have any affect on my success in life

6.2.Q2 Do you attend class regularly?

☐ Always ☐ Frequently ☐ Rarely ☐ Never

Q3 Do you complete and turn in assignments on time?

☐ Always ☐ Frequently ☐ Rarely ☐ Never

Work effectively in a group setting, recognizing and respecting cultural and personal/individual differences, and observing academic, professional standards of civil engagement.

Q1 How well do you respect cultural and individual differences in group settings (work, social and private)?

☐ Very Well ☐ Fairly Well ☐ Not Well at All ☐ Not Able

Q2 In school and at work, how well do you observe academic and professional standards of civic engagement?

☐ Very Well ☐ Fairly Well ☐ Not Well at All ☐ Not Able

Identify and use appropriate (federal, state, community, individual, instructional, and student support) resources to solve a problem or find an answer?

Q1 How effectively do you use the private, campus, state, and federal resources available to help me solve problems or find answers?

☐ Very Effectively ☐ Fairly Effectively ☐ Not Very Effectively
Completed Student Survey

INSTITUTIONAL LEARNING OUTCOME VI RESULTS FOR HE 101, PE 148, HE 102

6.1.Q1 Have you set a personal goal and made progress towards achieving it?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have set a personal goal and made significant progress in achieving it</td>
<td>33%</td>
<td>24</td>
</tr>
<tr>
<td>I have set a personal goal and made some progress</td>
<td>53%</td>
<td>38</td>
</tr>
<tr>
<td>I have begun to set a goal but have made little progress in achieving it</td>
<td>11%</td>
<td>8</td>
</tr>
<tr>
<td>I haven’t set a personal goal</td>
<td>6%</td>
<td>4</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions

6.1.Q2 Have you set an academic goal and made progress towards achieving it?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have set an academic goal and made significant progress in achieving it</td>
<td>24%</td>
<td>17</td>
</tr>
<tr>
<td>I have set an academic goal and made some progress</td>
<td>57%</td>
<td>41</td>
</tr>
<tr>
<td>I have begun to set an academic goal but have made little progress in achieving it</td>
<td>13%</td>
<td>9</td>
</tr>
<tr>
<td>I haven’t set an academic goal</td>
<td>7%</td>
<td>5</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions
6.1.Q3 Have you set a career goal and made progress towards achieving it?

- I have set a career goal and made significant progress in achieving it: 21% (15)
- I have set a career goal and made some progress: 43%
- I have begun to set a career goal but have made little progress in achieving it: 26% (19)
- I haven't set a career goal: 13% (9)

* 72 total responses, 100% of submissions

6.1.Q4 Do you believe you will continue to learn throughout your life?

- Very much so: 92% (66)
- To some degree: 10% (7)
- Not really: 0% (0)
- Not at all: 0% (0)

* 72 total responses, 100% of submissions

6.1.Q4 Do you consistently make choices that benefit your physical and mental health?

- Consistently: 32% (23)
- Frequently: 58% (42)
- Rarely: 11% (8)
- Never: 0% (0)

* 72 total responses, 100% of submissions
### 6.2.Q1 Do you understand that my personal choices affect my success in life?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>96%</td>
<td>69</td>
</tr>
<tr>
<td>I don't fully understand</td>
<td>4%</td>
<td>3</td>
</tr>
<tr>
<td>I don't think my personal choices affect my success in life</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>I don't believe my personal choices have much affect on my success in life</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions

### 6.2.Q2 Do you attend class regularly?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>83%</td>
<td>60</td>
</tr>
<tr>
<td>Frequently</td>
<td>18%</td>
<td>13</td>
</tr>
<tr>
<td>Rarely</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Never</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions

### 6.2.Q3 Do you complete and turn in assignments on time?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>71%</td>
<td>51</td>
</tr>
<tr>
<td>Frequently</td>
<td>33%</td>
<td>24</td>
</tr>
<tr>
<td>Rarely</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Never</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions

### 6.3.Q1 How well do you respect cultural and individual differences in group settings

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Well</td>
<td>83%</td>
<td>60</td>
</tr>
<tr>
<td>Fairly</td>
<td>17%</td>
<td>12</td>
</tr>
<tr>
<td>Not Well at All</td>
<td>1%</td>
<td>1</td>
</tr>
<tr>
<td>Not Able</td>
<td>0%</td>
<td>0</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions

### 6.3.Q2 In school and at work, how well do you observe academic and professional standards of civic engagement?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Well</td>
<td>47%</td>
<td>34</td>
</tr>
<tr>
<td>Fairly</td>
<td>50%</td>
<td>36</td>
</tr>
<tr>
<td>Not Well at All</td>
<td>1%</td>
<td>1</td>
</tr>
<tr>
<td>Not Able</td>
<td>1%</td>
<td>1</td>
</tr>
</tbody>
</table>

* 72 total responses, 100% of submissions
I sent the link through Forms Central (we now have a site license for this program) to students in HE 101 (Personal Health Awareness), He 102 (Womens Health) and PE 148 (Walking and Jogging). There were 72 responses and as you can see the majority of the responses were for the HE 101 class. I have been using personal goal assignments in my classes for years but have never surveyed the students prior to the goal assignment. After I administered the questionnaire and received the results I then discussed the goal assignment to each class. We also discuss the Seven Keys to Effective Goal Planning and the assignment requires specific instructions and details including the steps needed to accomplish the goal. The goal can be about any topic (except in the PE 148 class in which three fitness/nutrition goals are required), except losing weight and semester GPA (they will not know the answer to this by the time they do their goal evaluation).
HEALTH 101
GOAL EVALUATION

Please start the evaluation by restating your goal:

To what extent do you agree or disagree with each of the statements about the Goal assignment? Just type the number which indicates your response at the END of each statement, so that when you FORWARD it to me it’s clear which question it belongs to.

1. The assignment helped me to identify an important goal that I wanted to accomplish.
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

2. The goal assignment 'connected' with other content in the course.
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

3. The assignment was clear and the instructions were easy to understand
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

4. I was successful in accomplishing my goal
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

5. My goal followed the seven keys to effective goal planning that were included in the course content.
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

6. My goal was realistic.
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

7. This assignment was effective in motivating me to complete a task.
   1 = Strongly agree  2 = Agree  3 = Uncertain  4 = Disagree  5 = Strongly Disagree
   Comments or suggestions are welcome):

8. If you were unsuccessful in accomplishing your goal, please explain what factors contributed to this and what could you do next time to be more successful.

9. How could this assignment be improved?
Although it might seem that the results are very general and not very useful, however I found them to be interesting as I believe the students were quite honest in their evaluation of their goal setting abilities and other skills required to be a successful student, such as attending class and turning in assignments on time.

I believe that my discussions with my students after the questionnaire was administered allowed me to explain learning outcomes, particularly ISLO VI, in relationship to all of their coursework as well as to their general college skills and behaviors and their long-term personal and academic goals. This might be the most valuable part of the exercise; the discussions that are possible to assist students to look at these ‘outcomes’ as an important part of their lives.

I find the fact that 96% realize their personal choices affect their success in life but that 33% ‘frequently’ turn in assignments on time, and that 31% do not use resources effectively is indicative of the issues that prevent student success. We need to ensure that students begin the process of understanding that success in the classroom is a partnership between themselves and their instructors and utilizing the many resources available to assist them.

Midway through the semester I allow them to review their goals and make any adjustments that they think would be appropriate. I allow this because many students are unrealistic about they might actually accomplish in a short 14 weeks. About 25% will make some adjustments to their goal.

I did not repeat the questionnaire at the end of the semester, as there would be little benefit or change in responses. I require a goal evaluation at the end of the semester in which the student responds to their success in accomplishing their goals, what impediments caused them to be unsuccessful, was the goal(s) realistic and how effective was the assignment in motivating them to accomplish their goals.

In reviewing just one class, HE 101, the results were encouraging. The majority of students (86%) were successful in accomplishing their goal. They all felt the assignment was helpful in motivating them to think about goal setting, write an effective goal, and staying focused in order to complete the goal.

In conclusion, I believe the use of the questionnaire on ISLO VI was very useful in bringing these issues to the forefront of our classroom discussion on student success. Although all of these items might seem obvious to us they are not so obvious to our students. If we engage our students in discussion about success across the curriculum and create assignments in which they learn to engage in the process of realistically creating success then we have made a significant impact on our student’s future regardless of their individual paths.
Blake Barron, Biological Sciences

Core Learning Skills Pilot Study: Summary and Evaluation of Student Self-Assessment of Progress Toward ISLO #1 in Biological Sciences 102, Animal Biology (majors course) and Biomedical Sciences 136, Biology of Human Sexuality (non-majors course) for Fall 2014

Blake Barron, Professor, Department of Biological Sciences

In the fall 2014 semester, both the Biological Sciences 102, Animal Biology and the Biomedical Sciences 136, Biology of Human Sexuality courses participated in a self-evaluation and discussion of their learning relative to SBCC ISLO #1. This was initiated as part of the Core Learning Skills Faculty Workgroup Pilot Study focused on a more effective utilization of ISLOs/Core Learning Skills in the discussion and evaluation of student learning and pedagogy.

Students were initially surveyed a few weeks after the semester began in order to establish effective trust and rapport between students and the professor (Blake Barron) to help maintain more realistic and accurate data. The final survey was given during the last week of classes after students completed the requisite oral presentation (for Bio 102) or research paper (for BMS 136) that was used as the primary assessment of the accuracy of the student’s self evaluations. Overall student performance in each class is also considered in the instructor’s evaluation of the pilot study. Copies of both the initial and final surveys for each class are included at the end of this document.

General Student Data Summary
A comprehensive table and chart of the data is available as a separate spreadsheet file. Below are charts that summarize the initial and final survey data from each class. Group discussions with each entire class occurred during lecture three times during the semester. Briefly at the beginning of the semester to introduce the project, a second time when the initial survey was given and then a longer discussion when the final survey was taken at the end of each course. Based solely on student self-evaluation, there was general improvement in both the majors and the nonmajors classes with regard to ISLO #1. Not surprisingly, there was somewhat more variability in the initial and final results from the non-majors (BMS 136) class versus the majors (Bio 102) class. Based on the instructors knowledge of the students and their performance in each course over the semester and a broad review of the self-assessed data, the student’s seem to fall into three basic categories. High performing students know that they are doing well and evaluate themselves accordingly on ISLO #1 while the lowest performing students realized that they were not as well accomplished in the course and thus less capable relative to ISLO #1. However, predictably these less successful students generally rated their abilities higher for some questions than the instructor would have or that their assessment assignment scores reflect. The middle performing group of students seem to be the most likely cohort to over evaluate their own abilities, particularly in the non-majors class.

Biological Sciences 102 Results, Final Discussion and Instructor Assessment
As can be seen in the graph below, most Biology 102 students felt that they could very effectively/well or fairly effectively/well address the objectives in ISLO #1 at the beginning of the semester. At the end of the semester, these percentages changed somewhat with a general shift to a
As part of the assessment for ISLO #1 student success in Biology 102, each student was individually required to perform an oral presentation, utilizing digital resources, to their lab class. Based on the actual student scores and instructor’s assessment of these presentations, the self-evaluation data generally concurred with most student’s initial self assessments. It is not surprising that more students reported a greater level of comfort with their critical thinking skills (ISLO #1) after completing this assignment and the other requisite assessments for this challenging science majors course. This cohort of students are generally high achieving by comparison to the typical SBCC student. These students plan for careers in challenging scientific and medical fields and on average they demonstrate dedication to their studies and are focused on developing their critical thinking abilities. Of interest is the fact that some of the most successful students in the class reported only feeling fairly effective in their critical thinking abilities at the start of the semester. The instructor feels that this group of students likely presented the most accurate representation of their own skills on the survey. The students who struggled most with the presentation assignment who had below average performances generally reported that they felt less adept at ISLO #1, but some students in this group rated their abilities as fairly effective in the final survey. Clearly, these less accomplished student’s initial interpretations of their own abilities are inaccurate. Predictably, the students with the highest assignment scores showed little change between the initial and final survey indicating that they feel that they came into the course with well developed critical thinking skills.

POSSIBLE SURVEY RESPONSES

VE = VERY EFFECTIVELY
FE = FAIRLY EFFECTIVELY
NVE = NOT VERY EFFECTIVELY
NE = NOT EFFECTIVELY
VW = VERY WELL
FW = FAIRLY WELL
NWAA = NOT WELL AT ALL
NA = NOT ABLE
The following four directed questions relative to student's interpretations of their self-assessment were included on the final survey given to the class, with the following general summarized results.

1. Regarding Biology 102 only, what learning skill or technique (not content information) do you feel that you developed the most during this semester?

All of the responses fell into one of these categories with time management being the most common response:

- time management
- being more organized
- general study skills
- consistent study habits
- observation skills
- scientific analysis
- memorization ability
- learning much material in a short time
- accurate evaluation of resources
- more effective reading
- synthesizing information together
- pattern recognition skills

2. Based on what you remember that you completed on the first ISLO survey and considering the expectations of this course (Bio 102), do you feel your initial interpretation of your own abilities was accurate? If not, in what areas do you think you were most inaccurate in your evaluation of your own abilities?

Initially Accurate = 72% of students reported that their initial responses were accurate
Initially Inaccurate = 28% of students reported that their initial responses were inaccurate

The few inaccuracy's that were reported were relative to time management and general study habits.

3. Do you believe that your abilities to do the tasks indicated in the survey have improved as a result of completing Biology 102?

Every student except one felt that their ISLO #1 skills had improved. The single student felt they already had these skills well developed before enrolling in Biology 102. The instructor would agree as this was the top performing student in the class who has already earned a master’s degree in another discipline and thus this student is an outlier in the data.

4. Which of the tasks indicated in the survey do you feel that you improved the most upon as a result of completing Biology 102?

All of the responses fell into one of these categories with problem solving and effective paper writing being the most common responses:

- problem solving
- effective paper writing
- research skills for papers and presentations
- defining an issue
- distinguishing fact from opinion
- ability to distinguish relevant information
- ability to narrow down a topic
- integrating multiple sources together
- ability to support a conclusion

In the final discussion with this class about 60% of the class (hands up in-class vote) reported that they felt that more instructors should spend more time discussing the learning process and ISLOs (not just requisite course material) during lecture/lab, while the rest of the class was relatively indifferent about the pilot study. Biology major students are usually able to make the direct connection between the skills they are developing in Biology 102 and their long term academic opportunities and future job responsibilities. This is a relatively engaged class of students, but many of them have still not developed a clear appreciation for the value of self-reflection as part of their own learning. Only a handful of students (all very high performing) felt that class time dedicated to self-assessment of the learning process utilizing ISLOs was wasted time. Generally, most students
responded that they would appreciate it if more instructors in discipline specific courses would dedicate more class time to a discussion of the learning process itself, how to specifically study for a course and/or the applicability of core learning skills/ISLOs to their long term career goals. Still, the level of enthusiasm demonstrated by the class for such an endeavor was fairly lackluster. Based on the student performances on the presentation assignment, the 72% accurate self-assessment result in the final survey is reasonably accurate, but a bit on the high side from the instructor’s point of view for this class. The instructor is encouraged by the results of the final survey’s directed questions relative to how much student’s feel that they are learning and growing in their academic abilities by completing Biology 102. The gained skills student’s reported in the final survey are among the most important critical thinking skills needed for a scientist in the 21st century.

**Biomedical Sciences 136 Results, Final Discussion and Instructor Assessment**

As can be seen in the graph below, most Biomed 136 students felt that they could very effectively/well or fairly effectively/well address the objectives in ISLO #1 at the beginning of the semester. At the end of the semester, these percentages changed such that a significantly greater number of students felt that they could comfortably perform the requirements of ISLO #1. For instance, regarding question #1, 30% of students initially responded that they could “very effectively” define several key issues that needed to be covered and this number more than doubled to 65% responding the same way in the final survey.

As part of the assessment for student success at ISLO #1 for Biomed 136, each student was individually required to write a properly cited, formal literature review paper on a topic related to the Biology of Human Sexuality. Based on the actual student scores and instructor’s assessment of these presentations, the student’s self-evaluation data was fairly inaccurate. Many students initially ranked their abilities at a higher level of effectiveness at ISLO #1 than they were able to demonstrate in their paper writing. This is a heterogeneous class of non-science major students whose critical thinking skills have historically been underdeveloped. Similar to the majors course (Bio 102), the students who struggled most with the paper assignment who demonstrated below average performances generally reported that they felt less proficient at ISLO #1, but many students in this group rated their abilities as fairly or very effective. Again, the students with the highest assignment scores showed little change between the initial and final survey indicating that they came into the course recognizing their better developed critical thinking skills.
The same four directed questions relative to student’s interpretations of their self-assessment were included on the final survey given to this class, with the following general summarized results.

1. Regarding Biomed 136 only, what learning skill or technique (not content information) do you feel that you developed the most during this semester?

All of the responses fell into one of these categories with paper writing and research skills being the most common responses:

- paper writing skills
- library research skills
- note taking
- time management
- being more organized
- consistent study habits
- memorization ability

2. Based on what you remember that you completed on the first ISLO survey and considering the expectations of this course (BMS 136), do you feel your initial interpretation of your own abilities was accurate? If not, in what areas do you think you were most inaccurate in your evaluation of your own abilities?

Initially Accurate = 73% of students reported that their initial responses were accurate
Initially Inaccurate = 27% of students reported that their initial responses were inaccurate

The few inaccuracies that were reported were relative to general study habits, note taking and memorization skills.

3. Do you believe that your abilities to do the tasks indicated in the survey have improved as a result of completing Biomed 136?
Every student except one felt that their ISLO #1 skills had improved. The single student stated that they did not seek to improve because they were only taking the course pass/no pass and thus this student is actually an outlier in the data.

4. Which of the tasks indicated in the survey do you feel that you improved the most upon as a result of completing Biomed 136?

All of the responses fell into one of these categories with defining an issue and distinguishing fact from opinion being the most common responses:

• defining an issue
• distinguishing fact from opinion
• ability to distinguish relevant information
• research skills for papers and presentations
• ability to narrow down a topic
• integrating multiple sources together
• ability to support a conclusion
In the final discussion with this class about 70% (hands up in-class vote) of the class reported that they felt that more instructors should spend more time discussing the learning process and ISLOs (not just requisite course material) during lecture, while the rest of the class was generally uninterested in the pilot study. Only two students (both very high performing) felt that class time dedicated to self-assessment of the learning process utilizing ISLOs was wasted time. As with Biology 102, most students responded that they would appreciate it if more instructors in discipline specific courses would dedicate more class time to a discussion of the learning process, how to specifically study for a course and/or the applicability of core learning skills/ISLOs to their long term career goals. However, the level of enthusiasm for such a focus was not at all inspiring to the instructor.

As this instructor gets to know many of his students quite well during each semester, none of this data was surprising and it was about what the instructor expected as the outcome for these exercises. Curiously, the self-assessed accuracy of the initial versus the final survey was nearly identical between the two classes and is close to the average student success rate for courses in the Biological Sciences Department. On average for these classes, the student’s self-assessments showed a high enough degree of inconsistency relative to the assignment scores to make the instructor quite suspect of the validity of using student self-reported data as a measure of student success at developing the critical thinking skills outlined in ISLO #1. However, while the actual student data may be erroneous, certainly the discussion of the development of core critical thinking skills with the class has benefit for at least some students in these courses. In this instructor’s opinion, the survey tool does provide an opportunity to facilitate the discussion of ISLOs as core learning skills necessary for higher level student success, but student self-assessment cannot be the sole data used to validate student achievement of the ISLOs at SBCC. Other assessment tools should be incorporated to determine that student’s are attaining a reasonable level of proficiency with ISLO objectives. Importantly, since these core learning skills are institutional it is critical that similar self-assessment student surveys be given to a cohort of (or all) SBCC students upon their entrance to the college and then near the end of their time at SBCC after students have completed multiple classes across various disciplines. This would provide a broader and more appropriate measure of student ISLO achievement versus the degree of core learning skill development relative to one course.