General Education Assessment Report 2016

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Images of SLCC student ePortfolios used with permission.

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Assessment Methods

Electronic portfolios are increasingly being used in higher education to integrate and showcase student learning. Portfolios also allow institutions to use student artifacts and reflection to directly assess the efficacy of particular academic programs. For this assessment, we were primarily interested in examining the extent to which ePortfolios can be used to characterize whether graduating students are meeting Salt Lake Community College's (SLCC) General Education learning outcomes, and whether the General Education program is offering students opportunities to progress towards those outcomes.

Our Institutional Research Office pulled a sample of 160 students who graduated in May 2016, and who did not transfer in any external credits for their A.A. or A.S. degrees. This ensured that we were looking at students who completed all of their General Education coursework at SLCC instead of at other institutions. From that pool of 160 students, we selected the first 100 students (50 male, 50 female) who had ePortfolios accessible in our Banner system. This collection of 100 ePortfolios from graduating A.A. and A.S. students became the sample for the assessment study.

We assessed General Education outcomes using a holistic ePortfolio rubric that is an amalgamation of our own internal measures and modified components of the AAC&U Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics. Further information regarding the AAC&U's VALUE rubrics can be found here: http://www.aacu.org/value/rubrics.

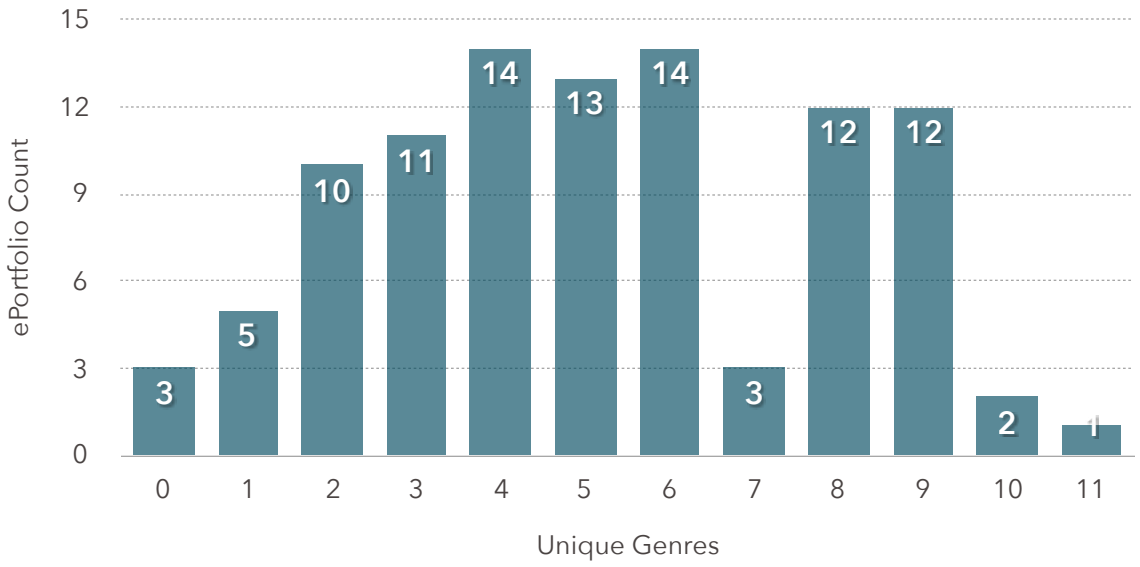
We assembled eleven 2-person assessment teams (see Acknowledgements for teams) to examine all 100 ePortfolios. Each assessment team came to a consensus rating for every ePortfolio on all of the rubric criteria for which they were responsible, before moving on to the next ePortfolio.

Effective Communication

Students communicate effectively. *This includes developing critical literacies—reading, writing, speaking, listening, visual understanding—that they can apply in various contexts; Organizing and presenting ideas and information visually, orally, and in writing according to standard usage; Understanding and using the elements of effective communication in interpersonal, small group, and mass settings.*

We operationalize effective communication in a number of ways. The first thing that interested us is whether students are getting ample opportunities to write in multiple genres. One assessment team examined the ePortfolios in the sample and counted the number of distinct genres of writing in each.[1] Collectively, the 100 ePortfolios averaged 5.1 different genres each. Figure 1 breaks down the sample of ePortfolios by the number of genres represented. With the odd exception of the three portfolios with seven unique genres, it represents a fairly normal distribution. We conclude that the majority of SLCC's graduates are getting sufficient experience writing in a variety of genres.

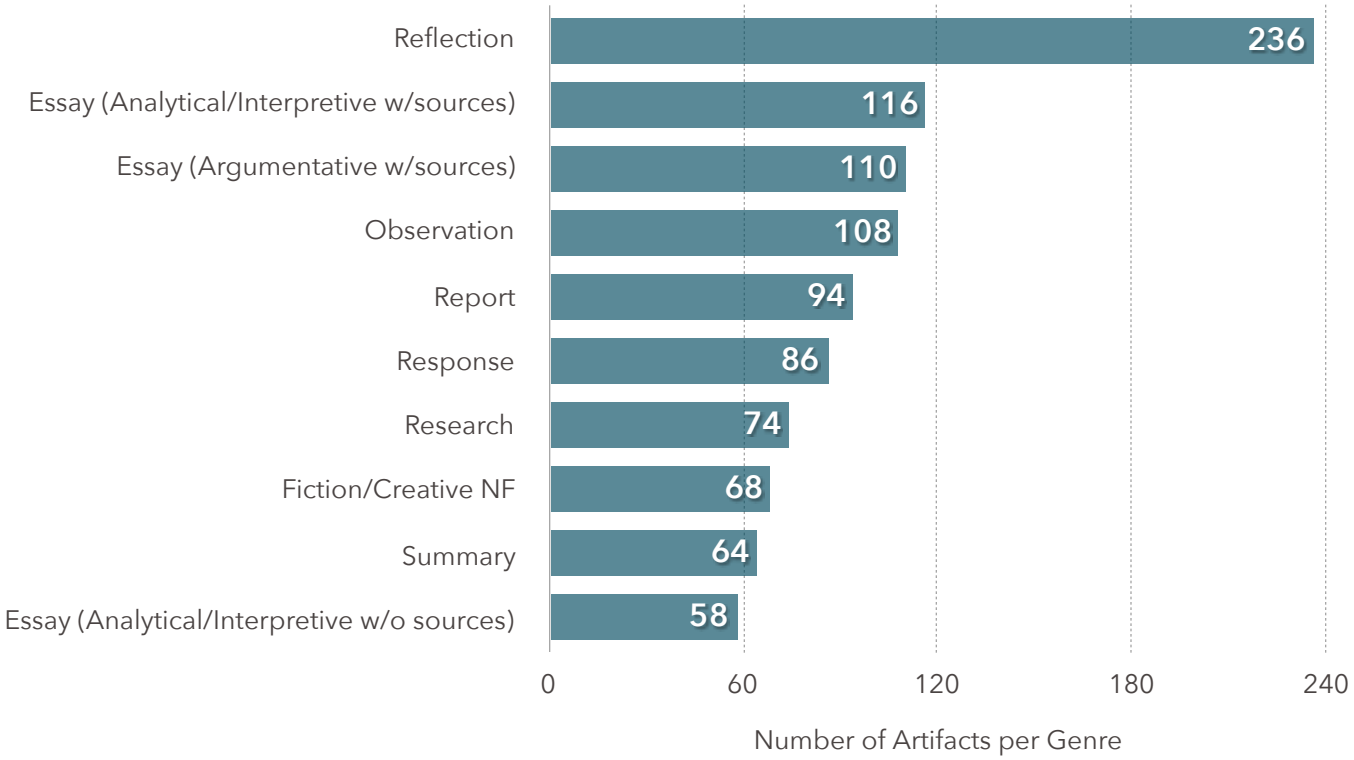
Figure 1: Count of ePortfolios with Various Numbers of Unique Genres. (n=100)



[1] The following 35 genres were identified: Abstract, Annotated Bibliography, Case Study, Civic, Code, Critique/ Evaluation, Essay (Analytical, Interpretive w/o sources), Essay (Analytical, Interpretive with sources), Essay (Argumentative w/o sources), Essay (Argumentative with sources), Essay (Explorative w/o sources), Essay (Explorative with sources), Ethnography, Exam, Fiction/Creative Non-Fiction, Journalism, Lab Report, Legal, Log, Medical, Notes, Observation, Other, Plan, Presentation, Profile, Proposal, Reflection, Report, Research, Response, Speech, Summary, Technical, Web (e.g. site, page, blog), and Workplace.

Figure 2 depicts the ten most common genres in the sampled student portfolios. It's not surprising that Reflection (n=236) is the genre with the highest number of artifacts, as reflection is required in all General Education courses. In fact, it should be noticeably more prominent. If students did a reflection in each General Education course and put it in the ePortfolio (which is the requirement), the number of total reflections in the whole sample would actually be more like 1200.[2] While reflective pedagogy has made tremendous progress in our General Education program, this is an indication that we can always do better.

Figure 2: Ten Most Common Genres of Writing in Student ePortfolios.



The other most common genres represented in student ePortfolios are what we might expect from the range of General Education courses: essays, reports, summaries, observations, etc. The "presentations" genre narrowly missed the top ten list. This ePortfolio assessment illustrates a strength of our General Education program—namely, that faculty across the disciplines are making considered judgments and assigning a variety of writing projects that best fit their specific courses. Students are well-served by that variety.

[2] Twelve required Gen Ed courses—each with one reflection—multiplied by 100 ePortfolios equals 1200 reflections.

We were also interested in the quality of student writing. In examining the AAC&U VALUE rubric for written communication, we determined that two elements of student writing are readily assessable via artifacts in student ePortfolios: whether students effectively employ genre conventions, and whether student writing is mechanically sound. Once we had identified the range of genres in the student portfolios, we selected several genres for which we felt genre conventions were clear regardless of the class and assignment.

Our Writing Across the College Director modified the genre conventions portion of the written communication VALUE rubric to create a specific rubric for each genre. The reviewing teams scored the artifacts of student writing according to their performance levels. As Table 1 (pages 7-8) indicates, students generally understand and use genre conventions in their writing. Between 64% and 90% of the artifacts in this sample were placed in the top two performance levels. The highest mean score was for summaries (mean=3.21), with proposals (mean=3.01) ranking in second place. Of all the genres, only annotated bibliographies had artifacts that fell into the bottom performance level.

The reviewers then applied the syntax and mechanics portion of the VALUE rubric to the same sample of student writing. Table 2 on page 9 presents the results, and they indicate that—regardless of genre—the vast majority of student writing uses language that "generally" or "skillfully" conveys meaning and is mostly or completely free of mechanical errors.

Table 1: Percentage of Assignments' Scores for Effectively Employing Genre Conventions.

	Performance Levels			
	1	**2**	**3**	**4**
	Confusingly or inadequately presents references to talking points and/or extended text. Organization is confusing on both the macro and micro-levels (e.g., entire PowerPoint/ single slide).	Inconsistently presents references to talking points and extended text. Organization is inconsistent on both the macro and micro-levels (e.g., entire PowerPoint/ single slide).	Consists of talking points that serve as references to presentation to an audience, yet may occasionally include too much extended text. Organization of presentation points is logical on the macro-level but may be inconsistent on the micro-level (e.g., entire PowerPoint/single slide).	Consists of talking points that clearly serve as references to presentation to an audience, rather than items to be read. Organization of presentation points is logical and engaging on the both the macro and micro-levels (e.g., entire PowerPoint/single slide).
Presentation (n=22, mean=2.73)	**0%**	**36%**	**55%**	**9%**
	Presents an inadequate account of the subject. Does not connect the subject to a larger context or purpose. Confused use of observation, research, quotation, and summary strategies. Organization distracts from clarity.	Presents an account that does not connect the subject to a larger context or purpose. Inconsistently uses observation, research, quotation, and summary strategies to maintain interest. Organization occasionally detracts from clarity.	Presents an engaging account that includes minimal connection between the subject and a larger context or purpose. Uses observation, research, quotation, and summary strategies to maintain interest level. Organization does not detract from clarity.	Presents a compelling and engaging account that includes meaningful connection between the subject and a larger context or purpose. Uses observation, research, quotation, and summary strategies to maintain high interest level. Organization contributes to clarity and engagement.
Profile (n=19, mean=2.74)	**0%**	**37%**	**53%**	**10%**
	References a text or event but does not describes the overall point. Uses quotations or repeats necessary details. Includes own opinion.	Describes a text's or event's overall point, but goes no more in-depth. Includes unnecessary detail or quotations. May refer to source material in a limited manner.	Consistently conveys key points of a text or experience without much detail or quotations. Refers to source material in an observational or reporting manner without inserting own opinion.	Uses fluid sentence and paragraph structures to convey the key points of a text or experience without unnecessary detail or quotations. Consistently refers to source material in an observational or reporting manner without inserting own opinion.
Summary (n=19, mean=3.21)	**0%**	**10%**	**58%**	**32%**

Table 1 Continued

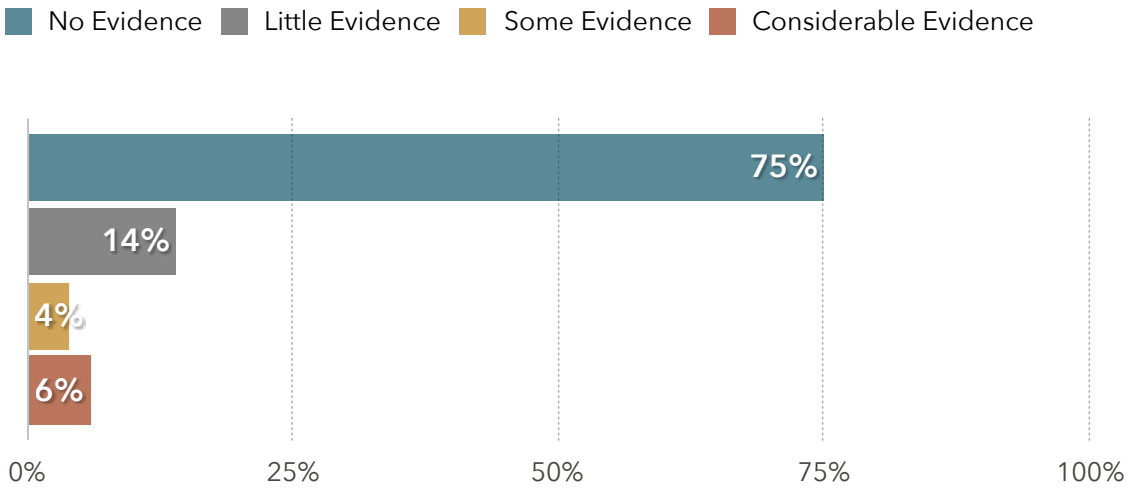
	C/E summarizes source inadequately or inaccurately. Provides own opinion without rationale. No referrals to larger context, purpose, or discussion. Organization is confusing. Style/register is inconsistent.	C/E summarizes source inadequately for critique of it. Provides own opinion with minimal rationale. No referrals to larger context, purpose, or discussion. Organization is inconsistent. Style/register is inconsistent.	C/E ethically summarizes source and follows most summary conventions. Provides own opinion/ perspective on source that includes claims and rationale. Limited referrals to larger context, purpose, or discussion. Organization does not detract from clarity. Style/ register is mostly appropriate for the writing task.	C/E ethically summarizes source and follows all summary conventions. Provides own opinion/ perspective on source that logically builds from claims, reasoning (optional: evidence). Skillfully situates c/e within larger context, purpose, or discussion. Style/register consistently appropriate for the writing task.
Critique/ Evaluation (n=11, mean=2.73)	**0%**	**36%**	**55%**	**9%**
	Proposal is made without context and may be unrealistic. Writing is inconsistent in register/ tone. Organization detracts from clarity.	Proposal is made, but provides minimal context, background, and need. Proposal may seem oversimplified. Writing is inconsistent in register/ tone. Organization may occasionally detract from clarity.	Proposal is reasonable and made in response to adequate context, background, and need. Some rationale is included. Writing is formal in register/tone. The organization does not detract from the clarity of the proposal.	Proposal is specific and reasonable, thoroughly articulated in response to well-presented context, background, and need. Sophisticated, fluent writing addresses audience appropriately. Organization contributes to the proposal's clarity.
Proposal (n=10, mean=3.01)	**0%**	**20%**	**50%**	**30%**
	Citations are quite incomplete (e.g., just a webpage). Summaries are not present or are, instead, opinions about the source. (Optional: Commentary is irrelevant to project.)	Citations are not alphabetized. Citations are inconsistent or significantly inaccurate. Summaries only indicate the overall point of the source. (Optional: Commentary is somewhat relevant to project.)	Sources may not be alphabetized. Sources are consistently and thoroughly cited but may include slight differences from reader's expectations. Summaries meet the conventions of summary. (Optional: Commentary is relevant to the sources and project.)	Alphabetized sources are accurately and consistently cited. Summaries are fluidly written and meet conventions of summary. (Optional: Commentary is graceful and relevant to the sources and project.)
Annotated Bibliography (n=20, mean=2.85)	**10%**	**25%**	**35%**	**30%**

Table 2: Percentage of Assignments' Scores for Syntax and Mechanics in the VALUE Rubric Performance Levels.

	Performance Levels			
	1	**2**	**3**	**4**
Genres	Uses language that sometimes impedes meaning because of errors in usage.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.
Presentation (n=22, mean=2.96)	**0%**	**9%**	**86%**	**5%**
Profile (n=19, mean=3.05)	**0%**	**0%**	**95%**	**5%**
Summary (n=19, mean=3.58)	**0%**	**5%**	**32%**	**63%**
Critique/ Evaluation (n=11, mean=3.18)	**0%**	**9%**	**64%**	**27%**
Proposal (n=10, mean=3.30)	**0%**	**10%**	**50%**	**40%**
Annotated Bibliography (n=20, mean=3.0)	**20%**	**0%**	**40%**	**40%**

Finally, the reviewers examined the amount of evidence in this sample of ePortfolios pertaining to oral communication. Figure 3 shows that three quarters (75%) of the ePortfolios had no evidence of oral communication, but this is an improvement over last year's assessment, in which 84% of the ePortfolios had no oral communication artifacts. Fourteen percent of the ePortfolios contained one oral communication artifact, 4% had two such artifacts, and an additional 6% had three or more oral presentations. With so few ePortfolios containing evidence of oral communication, we did not spend time evaluating the quality of student oral presentations. If we want to do so in the future, we may create a separate sample of ePortfolios from students who took COMM 1020—Principles of Public Speaking.

Figure 3: Percentage of ePortfolios with Various Levels of Evidence that Students Communicate Orally.



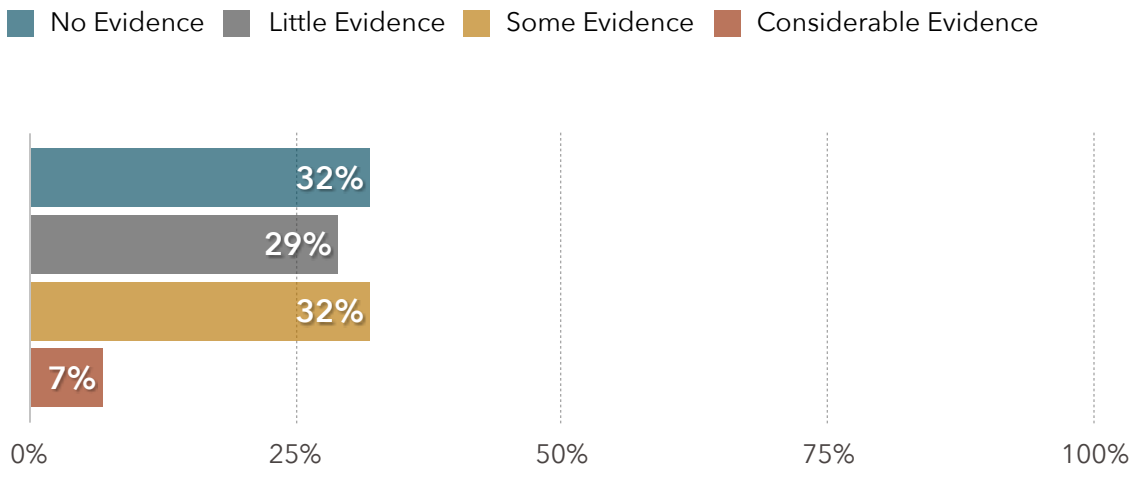
Quantitative Literacy

Students develop quantitative literacies necessary for their chosen field of study. *This includes approaching practical problems by choosing and applying appropriate mathematical techniques; Using information represented as data, graphs, tables, and schematics in a variety of disciplines; Applying mathematical theory, concepts, and methods of inquiry appropriate to program-specific problems.*

As with Effective Communication, we started our analysis looking at the amount of evidence in student ePortfolios indicating that they have been given sufficient opportunities in their assignments to use or interpret information represented as data, graphs, tables, and schematics in a variety of disciplines. Figure 4 shows that 32% of the ePortfolios in the sample had no such evidence, and that 29% had little evidence—meaning that they contained only one artifact in which students used or interpreted quantitative information. Thirty-two percent of the ePortfolios had "some evidence," or two artifacts, and 7% contained "considerable evidence," indicating the reviewers counted three or more artifacts.

How to explain the fact that nearly 1/3 of ePortfolios did not have evidence of students using or interpreting information via data, graphs, tables, and schematics? Clearly, some Math courses are not having students upload signature assignments into their ePortfolios. Beyond that, however, is our concern that disciplines outside of Mathematics are not creating signature assignments that ask students to grapple with quantitative data. This may be an opportunity for professional development workshops to help faculty design signature assignments that have quantitative analysis/interpretation elements.

Figure 4: Percentage of ePortfolios with Various Levels of Evidence that Students Use or Interpreted Information Represented as Data, Graphs, Tables, and Schematics.



The reviewers then looked at students' ability to interpret quantitative information presented to them in various forms. They found that the 100 ePortfolios in the sample collectively contained 123 artifacts in which students were attempting to interpret quantitative information. Table 3 shows that 89% of the artifacts provided accurate explanations of the information. Eleven percent of the artifacts presented only a "somewhat accurate explanation" of the data, but had mistakes related to computation or units of measure. None of the artifacts indicated that the students were drawing incorrect conclusions about what the data meant.

Table 3: Percentage of Artifacts (n=123) with Scores for the Interpretation of Quantitative Data in the VALUE Rubric Categories. (mean = 2.98)

1	2	3	4
Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means.	Provides somewhat accurate explanation of information presented in mathematical forms, but occasionally makes minor errors related to computations or units.	Provides accurate explanations of information presented in mathematical forms.	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information.
0%	**11%**	**79%**	**10%**

Another dimension of quantitative literacy is the ability to manipulate quantitative information from one form to another, such as converting a table of data to a graph or chart. The reviewers identified 119 artifacts in the portfolio sample in which students were asked to manipulate quantitative data. Table 4 on the next page indicates that none of the artifacts contained manipulations that were inaccurate or inappropriate. Seven percent of the artifacts represented manipulations that were partially inaccurate or inappropriate. Nine out of ten of the artifacts indicated that students competently or skillfully converted the "relevant information into an appropriate and desired mathematical portrayal."

The VALUE rubric for quantitative literacy also has a dimension assessing students' ability to communicate quantitative evidence in support of an argument or the purpose of their work. The reviewers identified 120 artifacts where students were given this task. Table 5 on the following page shows that in 9% of the artifacts, students did "not effectively connect [quantitative evidence] to the argument or purpose of the work." Over three quarters (78%) of the assignments indicated that

students connected the quantitative evidence to the argument or purpose of their work, albeit with some elements that were ineffective or uneven. In 13% of the artifacts students very effectively communicated quantitative evidence in connection with their argument or the purpose of their work.

Table 4: Percentage of Artifacts (n=119) with Scores for the Manipulation of Quantitative Data in VALUE Rubric Categories. (mean = 2.97)

1	2	3	4
Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.
0%	**7%**	**90%**	**3%**

Table 5: Percentage of Artifacts (n=120) with Scores for the Communication of Quantitative Data in the VALUE Rubric Categories. (mean = 3.03)

1	2	3	4
Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information in connection with the argument or purpose of the work, presets it in an effective format, and explicates it with consistently high quality.
0%	**9%**	**78%**	**13%**

Critical Thinking

Students think critically. *This includes reasoning effectively from available evidence; demonstrating effective problem solving; engaging in reflective thinking and expression; demonstrating higher-order skills such as analysis, synthesis, and evaluation; making connections across disciplines; applying scientific methods to the inquiry process.*

We started our examination of critical thinking among SLCC's AS/AA graduates by using two dimensions of the VALUE rubric for critical thinking. Table 6 shows our analysis of student use of evidence from outside sources. The reviewers looked at 277 artifacts in which students used outside of class evidence in the signature assignment. In nearly a third (31%) of the assignments students did not sufficiently interpret or evaluate those sources to develop a coherent analysis or synthesis. Fifty-six percent of the assignments indicate that the student did use the outside information to develop a coherent analysis or synthesis, and in 13% of the assignments, students used outside information to develop a comprehensive analysis or synthesis.

Table 6: Percentage of Artifacts (n=277) with Scores for Use of Evidence in the VALUE Rubric categories. (mean= 2.81)

1	2	3	4
Information is taken from source(s) without any interpretation/ evaluation.	Information is taken from source(s) with some interpretation/ evaluation, but not enough to develop a coherent analysis or synthesis.	Information is taken from source(s) with enough interpretation/ evaluation to develop a coherent analysis or synthesis.	Information is taken from source(s) with enough interpretation/ evaluation to develop a comprehensive analysis or synthesis.
1%	**30%**	**56%**	**13%**

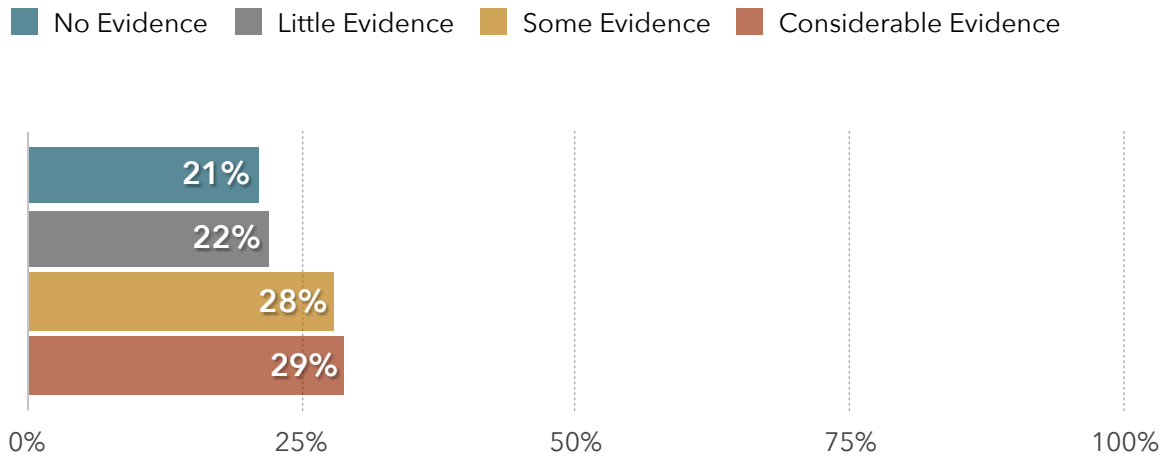
The second dimension from the VALUE critical thinking rubric our reviewers examined addresses students' ability to take a position. The reviewers looked at 289 artifacts in which students took a position. Table 7 on the next page shows that in 16% of the artifacts students took a position that was imaginative and took into account the complexities of the issue. In 56% of the artifacts students stated a position that took into account the complexities of the issue, although the position did not strike the reviewers as imaginative. In an additional 27% of the artifacts, students took positions that at least acknowledged different sides of an issue.

Table 7: Percentage of Artifacts (n=289) with Scores for Taking a Position in the VALUE Rubric categories. (mean= 2.86)

1	2	3	4
Specific position (perspective, thesis/ hypothesis) is stated, but is simplistic and obvious.	Specific position (perspective, thesis/ hypothesis) acknowledges different sides of an issue.	Specific position (perspective, thesis/ hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/ hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position are acknowledged. Others' points of view are synthesized within position.
1%	**27%**	**56%**	**16%**

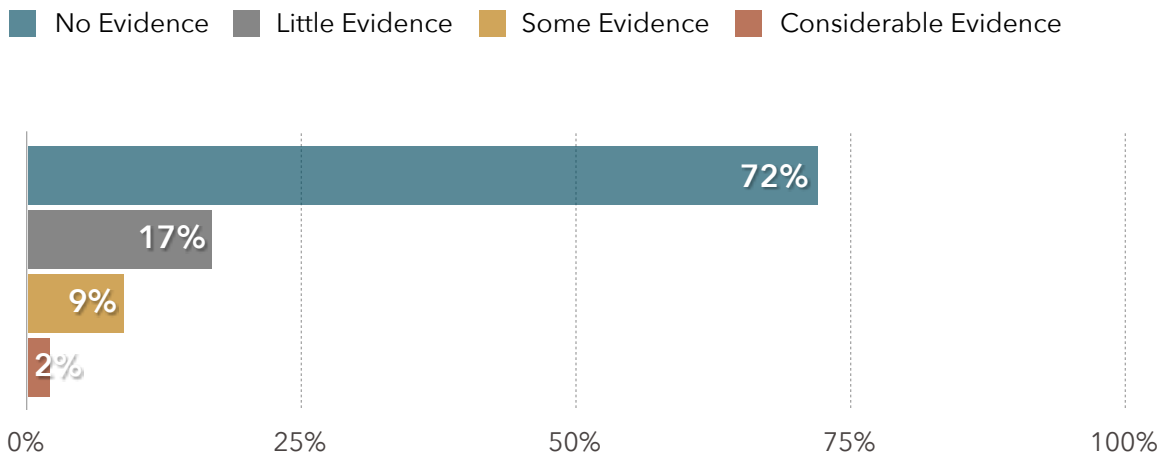
Another aspect of critical thinking that the ePortfolio can help us understand among SLCC students is whether they are getting sufficient practice dealing with unstructured problems. One team of reviewers counted signature assignments that were open-ended and did not have just one correct answer. We can see from Figure 5 that 21% of the ePortfolios had no evidence of unstructured problems and 22% had "little evidence"—or one unstructured problem. An additional 28% of the ePortfolios contained two unstructured problems as assignments—or "some" evidence—and 29% had "considerable" evidence, or 3 or more such assignments.

Figure 5: Percentage of ePortfolios with Various Levels of Evidence that Students Deal with Unstructured Problems.



We are also interested that our students use the scientific method or demonstrate that they understand it. Our reviewers counted the number of assignments in each ePortfolio that fit those criteria. Figure 6 shows that 72% of the ePortfolios had no artifacts where students demonstrated the use or understanding of the scientific method. This is a result we have seen in previous assessments. It may well indicate that faculty in the life and physical sciences believe that the signature assignments they ask students to put in their portfolios are not the ideal ones to address use or understanding of the scientific method. Students might, for example, be more fully engaged with the scientific method in lab assignments, but those assignments are not being showcased in their ePortfolios.

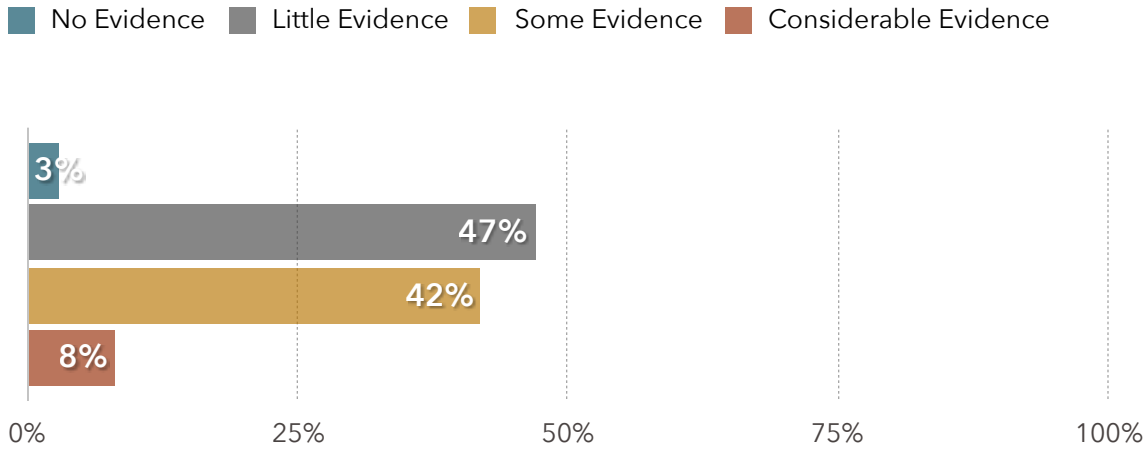
Figure 6: Percentage of ePortfolios with Various Levels of Evidence that Students Use/Understand the Scientific Method.



A final aspect of critical thinking that we can capture in ePortfolios is student reflective thinking and expression. Each General Education course should ask students to reflect on their learning. This may take various forms, but should generally ask students to place their work and learning—or themselves as learners—in broader intellectual or life contexts.

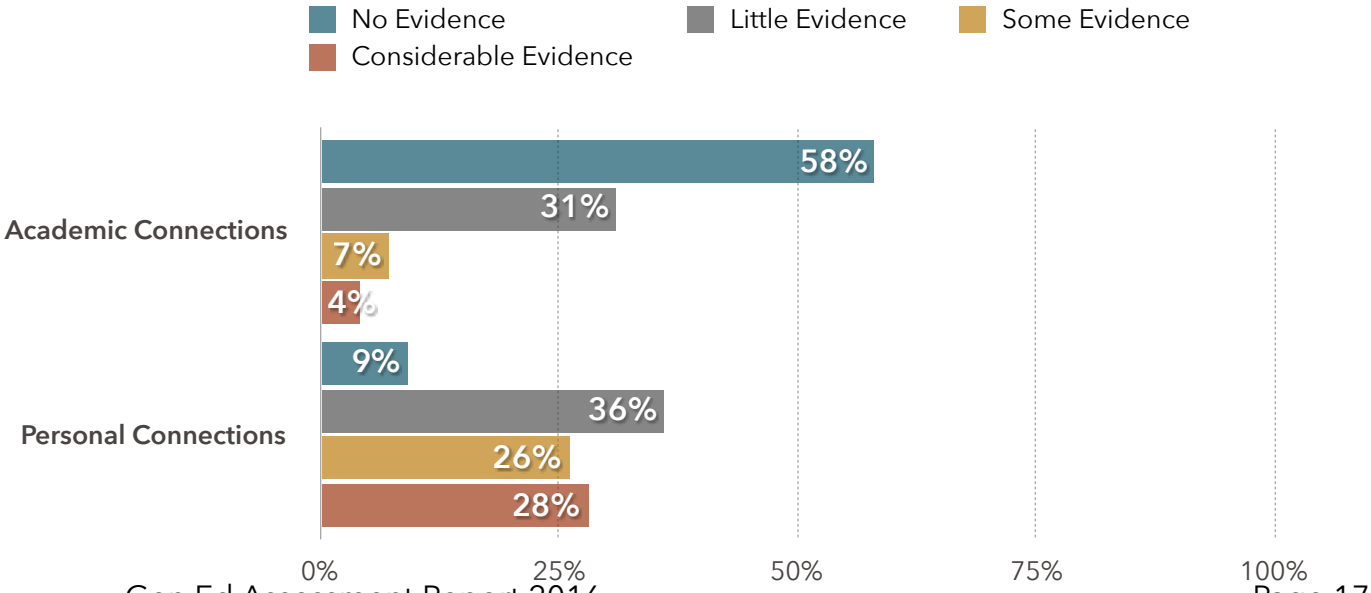
Figure 7 on the next page shows that only 3% of the ePortfolios in the sample had no reflection. Forty-seven percent of the ePortfolios had a little evidence—meaning up to five reflections—and 42% had some evidence, or 6-12 reflections. Only 8% had 13 or more instances of reflection. It appears, then, that reflective practice is beginning to be established as a cultural norm in General Education at SLCC.

Figure 7: Percentage of ePortfolios with Various Levels of Evidence that Students Engage in Reflection.



We then looked at the kinds of reflection that students do in their General Education courses. We know from this sample of ePortfolios that students are reflecting more on personal connections than on cross-disciplinary connections. Figure 8 indicates that 58% of the portfolios had no reflections in which the student made academic connections, while only 9% of the portfolios had no reflections in which the student made personal connections. While 28% of the portfolios contained "considerable" evidence (five or more reflections) of the student making personal connections, only 4% of the portfolios contained "considerable" evidence of the student making academic connections.

Figure 8: Percentage of ePortfolios with Various Levels of Evidence that Students Engage in Reflection on Academic Connections and Personal Life.



We know from experience that the quality of student reflection varies widely depending on how well reflection is integrated into course pedagogy and on the quality of the reflection prompts faculty give students. To assess the quality of student reflection in this report, we had a team of assessors quickly pick what they impressionistically thought were the three strongest student reflections per ePortfolio, and then had that team assess those reflections. Of course, some ePortfolios had less than three reflections total, so our sample size consisted of 267 reflections. The reviewers applied an in-house rubric to those reflections. Table 8 shows that over half (58%) of the reflections were scored in the top two categories—which we might summarize as good or excellent reflections. Twenty-seven percent of the reflections only partially addressed the reflection prompt, were insufficiently elaborated, made few connections, and/or offered few insights and perspectives. An additional 7% of the reflections did not address the reflection prompt and/or contained no elaboration.

Table 8: Percentage of Student Reflections (n=267) with Scores for Reflection Quality in the Rubric Categories. (mean= 2.71)

1	2	3	4
The writer fails to address the reflection prompt given by the instructor. The reflection piece contains no elaboration and is too short.	The writer partially addresses the reflection prompt, and fails to sufficiently elaborate his/her points, makes few connections, offers few insights and perspectives.	The writer addresses the reflection prompt, and does a fairly good job with elaboration, making connections, offering new insights and perspectives, and/or uses techniques such as questioning, comparing, interpreting and analyzing.	The writer directly addresses the reflection prompt, elaborates points, makes strong intellectual or personal connections, highlights new insights and perspectives, and/or uses techniques such as questioning, comparing, interpreting and analyzing.
7%	**27%**	**54%**	**12%**

Community and Civic Engagement

Students develop the knowledge and skills to be community engaged learners and scholars. *This includes understanding the natural, political, historical, social, and economic underpinnings of the local, national, and global communities to which they belong…*

Community and civic engagement is a rather large learning outcome that encompasses several different dimensions. We conducted a separate analysis of community and civic engagement that used a different methodology. That report has been **published separately** to the college community. This ePortfolio assessment is only able to shed light on basic civic literacy—namely, whether students are engaging with signature assignments that ask them to demonstrate understanding of either the U.S. or the world outside of the United States. Figure 9 indicates that 7% of sampled students had no evidence in their ePortfolios that they have knowledge of the politics, economics, historical development, or geography of the United States. Fifteen percent had one artifact that fit these parameters, 18% had two artifacts, and 59% had three or more artifacts. With respect to global understanding, Figure 10 on the next page indicates that fully 39% of the ePortfolios had no artifacts indicating that students understand global politics, economics, historical development, or geography. Thirty-two percent had one artifact, 19% had two artifacts, and only 9% had three or more artifacts.

Figure 9. Percentage of ePortfolios with Various Levels of Evidence that Students Demonstrate Knowledge of the Politics, Economics, Historical Development, and/or Geography of the United States.

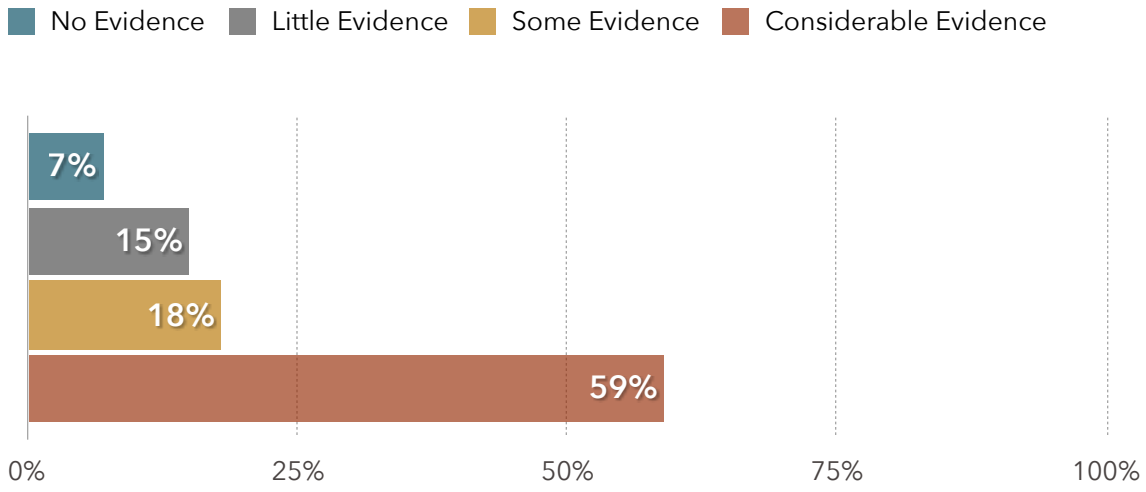
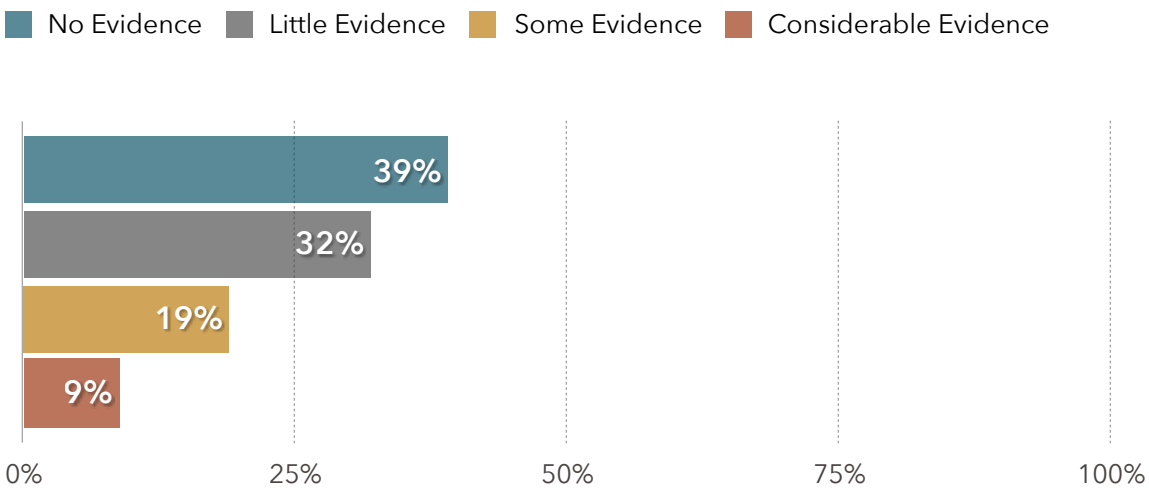


Figure 10. Percentage of ePortfolios with Various Levels of Evidence that Students Demonstrate Knowledge of Global Politics, Economics, Historical Development, and/or Geography.

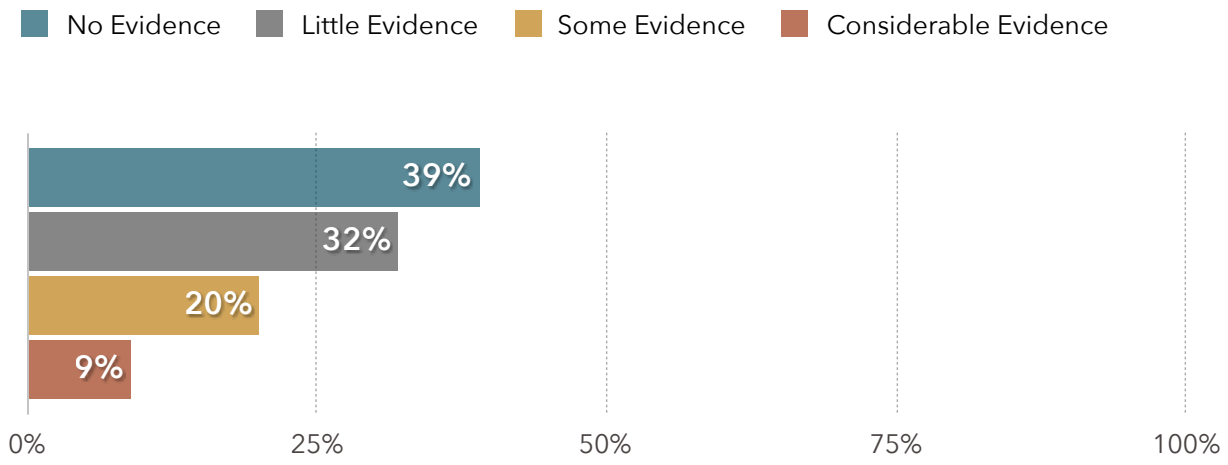


Working With Others

Students develop the knowledge and skills to work with others in a professional and constructive manner. *This includes engaging with a diverse set of others to produce professional work; Interacting competently across cultures; understanding and appreciating human differences; Understanding and acting on standards of professionalism and civility, including the SLCC Student Code of Conduct.*

Our reviewers examined signature assignments to ascertain whether students worked with classmates to complete assignments. As Figure 11 illustrates, only 9% of the ePortfolios had three or more artifacts ("considerable" evidence) of collaborative work, and 20% had two artifacts that required collaboration. Thirty-two percent had one artifact of collaborative work, and 39% had no evidence. These results are an improvement over previous years, possibly indicating that faculty are getting more comfortable designing and using collaborative signature assignments.

Figure 11. Percentage of ePortfolios with Various Levels of Evidence that Students Work with Others to Complete a Project or Assignment.

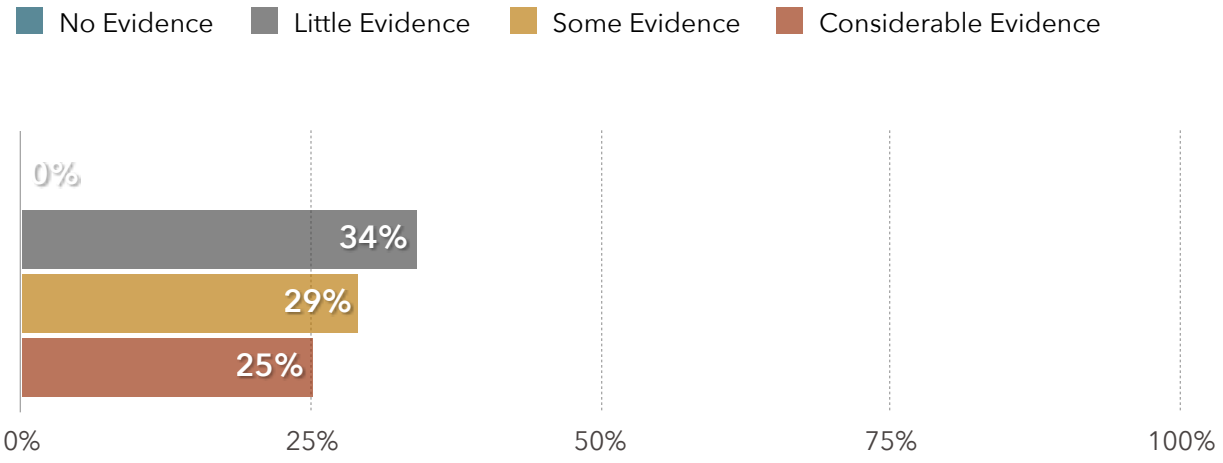


Information Literacy

Students develop information literacy. *This includes gathering and analyzing information using technology, library resources, and other modalities; understanding and acting upon ethical and security principles with respect to information acquisition and distribution; distinguishing between credible and non-credible sources of information, and using the former in their work in an appropriately documented fashion.*

We started our assessment of Information Literacy by counting the number of assignments in each portfolio that asked students to gather information using technology, library resources, or other modalities. In other words, the reviewers looked for assignments that clearly indicated that students used outside-of-classroom information sources. As depicted in Figure 12, in no cases was an ePortfolio completely lacking in such assignments. One-third (34%) had only one assignment in which the student clearly used outside-of-classroom research, 29% had two or three assignments, and 25% had four or more assignments.

Figure 12. Percentage of ePortfolios with Various Levels of Evidence that Students Gather Information Using Technology, Library Resources and Other Modalities.



For the qualitative assessment of information literacy, the reviewers holistically rated the entire ePortfolio using the part of the VALUE rubric for Information Literacy that asks whether students use information effectively to accomplish their purpose. Table 9 indicates that 13% of the portfolios scored in the lowest category, meaning that overall those students did not marshall information in the portfolio effectively. An

additional 44% of the ePortfolios did not fully communicate and organize information. About one-third (34%) of the portfolios communicated, organized and synthesized information effectively, while 8% did so with clarity and depth. We are currently working to deepen our future assessments of information literacy, possibly by identifying a specific subset of assignments and applying a rubric based on the Association of College Research Libraries (ACRL) recently published framework.

Table 9. Percentage of Portfolios (n=99) Whose Scores for Effective Use of Information Fell into the Information Literacy VALUE Rubric Categories.[3]

1	2	3	4
Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.
13%	**44%**	**34%**	**8%**

[3] One portfolio became unavailable to this group of reviewers, hence the sample size of 99 rather than 100.

Computer Literacy

Students develop computer literacy. *This includes using contemporary computer hardware and software to effectively complete college-level assignments; understanding and acting upon ethical and security principles with respect to computer technology.*

For computer literacy, the ePortfolio gives us some insight into the kinds of computer hardware and software students use to complete their assignments. Our intention for future assessments is to try to qualitatively assess student use of software.

Hardware

It is a given that all students used desktop or laptop computers to create their ePortfolios. In addition, our reviewers noted that 55% of the students had used a scanner—most often to scan and upload written Math assignments. Additionally, 45% of the ePortfolios used digital still or video cameras to record their work or experiences. Both numbers represent a slight increase over last year's assessment.

Software

Students use a variety of software programs to complete their work, the most common of which is a word processor. Fully 98% of the ePortfolios clearly evidenced the use of word processing software. Digital image editing software came in second place, with 44% of students using it. Presentation software came in third place, with 30% of the students using some variety of it in their signature assignments. Spreadsheets were used by 23% of the students.

Lifelong Wellness

Students develop the attitudes and skills for lifelong wellness. *This includes understanding the importance of physical activity and its connection to lifelong wellness; learning how participation in a fitness, sport or leisure activity results in daily benefits including stress reduction, endorphin release, and a sense of well-being.*

Each SLCC student is required to take a Lifelong Wellness (LW) course to receive an Associate's degree. Our reviewers examined a total of 98 artifacts in the ePortfolio sample, and applied an SLCC-developed rubric for how well the student understood the importance and personal use of lifetime activity and wellness. As Table 10 indicates, the reviewers scored 99% of the artifacts as indicating that the student had "adequately" or "effectively" expressed an understanding of lifelong wellness.

Table 10: Percentage of Students Whose Mean Scores for Lifelong Wellness Fell into These Ranges.

1	2	3	4
The posted artifact or instance of reflection was completely unsatisfactory.	At least one artifact or instance of reflection in which the student minimally expresses an understanding of the importance of physical activity and its connection to lifelong wellness.	At least one artifact or instance of reflection in which the student adequately expresses an understanding of the importance of physical activity and its connection to lifelong wellness.	At least one artifact or instance of reflection in which the student effectively expresses an understanding of the importance of physical activity and its connection to lifelong wellness.
0%	**1%**	**65%**	**34%**

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