Framingham State University

General Education Assessment Report

2013-2014

Assessment Advisory Group

And

Office of Assessment

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Political Science	Dr. Paul Ewenstein
Psychology and Philosophy	Dr. Charles Sachs
Sociology	Dr. Marian Cohen
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General Education Assessment Report 2013-14

Introduction

The assessment of general education objectives is a critical aspect of our work to continuously improve student learning at our institution. In addition, assessment of FSU's general education program is required by the New England Association Schools and Colleges (NEASC). The Office of Assessment has general oversight of the general education assessment process, and the Assessment Advisory Group (AAG) provides input and a faculty voice to this process.

"The general education program at FSU is intended to provide breadth in the baccalaureate degree program to foster student learning beyond a single, narrow discipline or field. General education is designed to facilitate the increase of knowledge, an appreciation for learning in a broad context, the ability to relate new information to what one has learned previously, the capacity to judge information rather than to simply accept it, and the facility to use what one learns in a realistic and logical manner. More specifically, the general education requirement is designed to help students to acquire the following learning objectives:

- Overarching Objective: Solve Problems Using Critical Thinking *(All General Education courses should meet this objective.)*

1. Communicate Effectively Orally
2. Communicate Effectively in Writing
3. Solve Problems Using Quantitative Thinking
4. Demonstrate a Critical Understanding of Human Diversity
5. Demonstrate Civic Literacy
6. Recognize Ethical and Social Responsibilities
7. Locate, Evaluate, and Apply Information
8. Solve Problems Using Creative Thinking
9. Demonstrate Technological Competency
10. Work Collaboratively and Independently" (Undergraduate Student Catalog 2012-13) " (FSU Catalog)

Specific courses in the general education curriculum are designated as focusing on each of the above outcomes. More information on the general education curriculum at FSU can be found at http://www.framingham.edu/undergraduate-catalogs/documents/1314/8a-gen-ed-requirements.pdf.

In 2013-14 we completed our second year of assessment of the general education curriculum using institutional portfolios. The recommendations from the 2011-12 report guided the implementation of several changes to both the assessment process and how results were reported. This year we assessed Objective 7: Locate, Evaluate, and Apply Information, and we conducted pilot studies using rubrics for Objective 6: Recognize Social and Ethical Responsibilities and Objective 9: Demonstrate Technological Competency.

This report focuses on the results of FSU's use of institutional portfolios of student artifacts and faculty developed rubrics to assess the general education program during the 2013-14 academic year.

Rubric Development Process

Rubric development is an ongoing process that began during the Fall 2010/Spring 2011 academic year. Faculty who are part of AAG, have been involved with developing or redesigning existing rubrics for general education outcomes since 2011. The Association of American Colleges and University (AAC&U) VALUE rubrics were used as a foundation. Working in small groups, faculty modified the AAC&U rubrics to more specifically align with the general education program at FSU. The utility of the rubric drafts was then evaluated using small samples of student assignments. The rubrics were revised based on the feedback from the AAG members that performed the evaluations.

The rubric for Locate, Evaluate, and Apply Information (Obj. 7) was pilot tested in AY2012-13 and it was used to assess General Education Objective 7 in AY2013-14. The rubrics for General Education Objectives 6 and 9 were created in AY 2013-14 and were used in small pilot studies to test their usability in scoring student work. The results from the pilot of these two rubrics were discussed extensively by the AAG. These two rubrics will be fine-tuned by faculty over the next academic year based on feedback from the AAG and faculty teaching general education courses.

Methods

Data Collection and Preparation

The Office of Assessment collected student assignments (called "artifacts") embedded in existing general education courses across campus. The Office of Assessment requested faculty teaching general education courses associated with the learning objectives 6, 7 and 9 to voluntarily submit samples of student work.

The Office of Assessment implemented several changes to the artifact collection process this year because the General Education Assessment Report of 2011-12 concluded that there were not enough artifacts collected to accurately assess learning objectives , and faculty were uncertain of the submission process. Consequently, in AY2013-14, faculty were given a clear set of instructions for submitting artifacts (See Appendix A). These instructions outlined the submission process and emphasized that the Office of Assessment was available to support faculty in their efforts to collect student work. Faculty were also provided a cover sheet to be submitted with the student work (See Appendix B). Between AY2012-13 and AY2013-14, the

number of artifacts collected by the Office of Assessment doubled (Table 1), suggesting greater faculty involvement.

2012-13		2013-14	
Objective	**# of Artifacts**	**Objective**	**# of Artifacts**
Overarching	55	Obj 6	23
Obj 2	32	Obj 7	120
Obj 3	10	Obj 9	54
Overall	**97**	**Overall**	**197**

Table 1. Institutional portfolios of artifacts AY 2012-13 to AY 2013-14.

Once collected, artifacts selected for the institutional portfolio were scrubbed of all student, course, and faculty information to ensure anonymity during the rating process. A panel of faculty was recruited as paid raters who provided scores for each artifact using the FSU rubric for each outcome assessed. Each rubric varies in the number of categories assessed for each outcome but all use a 0 to 4 scale where 0 is a low score and 4 is a high score (Appendix B).

Scoring Process

In AY2013-14, the scoring process was modified from previous years. Drs. Nicholas and Shearman led norming sessions for all faculty raters prior to scoring. Norming sessions were held for each objective in order to ensure that all raters were familiar with the institutional rubric (Appendix B). During these sessions, faculty practiced scoring student work using sample assignment prompts, and they engaged in discussions about the utility of the rubric. These exercises helped ensure all of the raters used the institutional rubrics similarly when scoring artifacts independently.

Based on findings from the 2012-13 General Education Assessment Report, the assignment prompts associated with the student work were provided to the raters in order to give raters context with which to score student work. After the training sessions, raters were paired into teams of two, and each team scored the same set of artifacts independently. After each rater in a team scored the first 10 artifacts the raters discussed their scores. If scores diverged by more than a point, the raters discussed why the scoring discrepancies existed and attempted to reach a consensus. Once this norming session was completed, each rater scored the remainder of their assigned artifacts independently without consultation.

Raters assigned sub scores for each component on the rubric. Scores ranged from 0-4 wherein higher scores reflect a greater level of competency in the outcome being assessed. An overall score for the artifact as arrived at by averaging sub-scores for a given artifact. When overall scores within a rater pair differed by more than 1 point, despite norming, a third faculty rater provided an additional score. Since the rubrics for Objectives 6 and 9 were being pilot tested this year, a third rater did not rescore artifacts that received divergent scores from the original two raters.

Results

Objective 7: Locate, Evaluate, and Apply Information

In the summer of 2014, three pairs of faculty raters scored 120 artifacts as part of the Objective 7 portfolio. All of the artifacts used for this assessment were written papers. The overall mean score for Objective 7 was 2.27 with a SD of 1.03 (See Table 2 for sub component scores). The frequency distribution of scores was positively skewed (Fig. 1) with the median score being higher than the mean score (Fig. 2).

Component	Mean	Stand. Dev.
Scope location	1.99	1.28
Attainment	1.77	1.34
Evaluation	2.69	1.13
Application of Info	2.24	1.04
Overall Mean	**2.27**	**1.03**

Table 2. 2013-2014 Overall Results for Objective 7: Locate, Evaluate, and Apply Information.

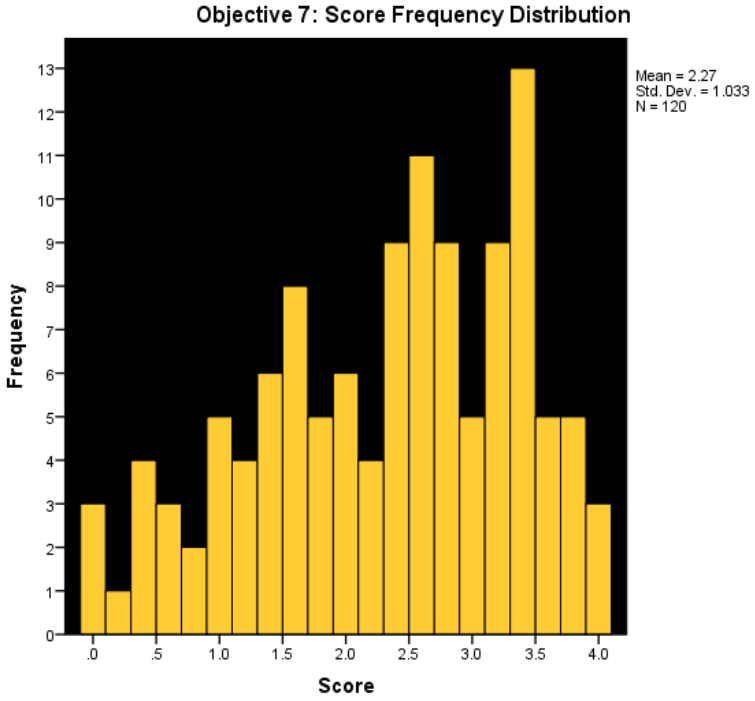

Figure 1. Frequency distribution for Objective 7: Locate, Evaluate, and Apply Information.

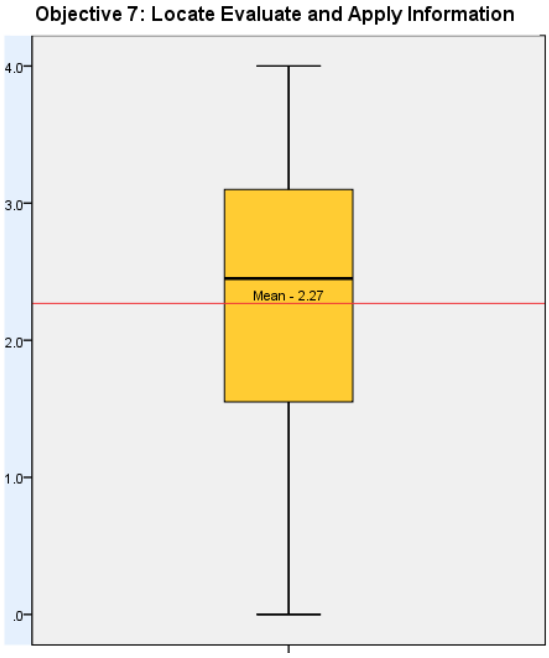

Figure 2. Box and whisker plot of the scores for 120 artifacts for Obj. 7.

The results of this objective reveal students at FSU perform well on this objective.

Objective 6: Ethical and Social Responsibility – Pilot Study

In summer 2014, one team of two faculty scored 23 artifacts as part of the Objective 6 portfolio. This was a pilot study designed to test the institution's rubric for Ethical and Social Responsibility, which was created by faculty in the previous year. Sixteen instructors taught general education courses for this objective, and all of the artifacts used for this pilot study were written papers associated with a single assignment.

On average, Objective 6 scores in 2013-14 were 1.85 (*SD* = .78). Breaking down the overall mean score for Objective 6 into the components on the rubric can provide further diagnostic insight into areas of strength or weakness in recognizing ethical and social responsibilities. Results indicated that students' scored an average of 1.46 on the item ethical

self-awareness, 2.15 on ethical issue recognition, 2.15 on understanding and application of ethical perspectives and concepts, and 1.21 on the evaluation of different ethical perspectives and concepts. These sub scores are represented in Table 3.

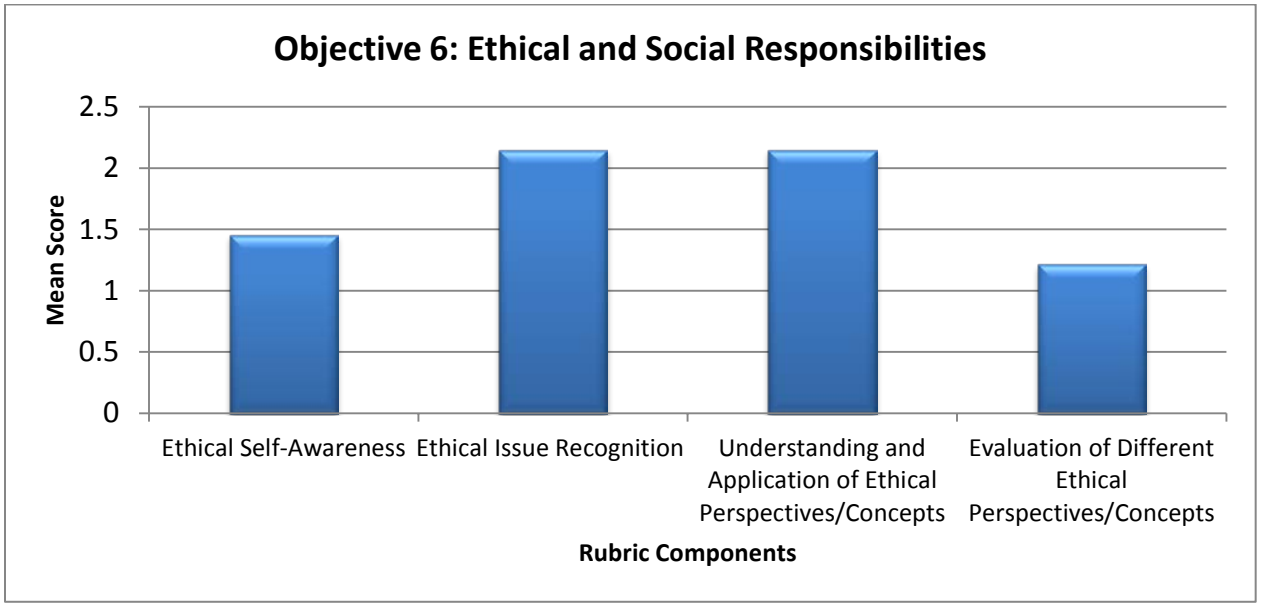

Figure 3. Average scores for each of the sub-categories rated for Objective 6: Ethical and Social Responsibilities

Component	Mean	Stand. Dev
Ethical Self-Awareness	1.46	0.65
Ethical Issue Recognition	2.15	0.28
Understanding and Application of Ethical Perspectives/Concepts	2.15	0.15
Evaluation of Diff Ethical Perspectives/Concepts	1.21	0.06
Overall Mean	**1.85**	**0.78**

Table 3. 2013-14 Obj 6 Sub-scores

Objective 9: Demonstrate Technological Competency – Pilot Study

In summer 2014, one team comprising of three faculty members rated 54 artifacts (samples of student work) as part of the Objective 9 portfolio. This was a pilot study designed to test the institution's rubric for Demonstrate Technological Competency, which was created by faculty in the previous year. The artifacts used for this pilot study included quizzes and PowerPoint presentations.

On average, Objective 9 scores in 2013-14 were 1.53 (*SD* = .63).Breaking down the overall mean score for Objective 9 into the components on the rubric can provide further diagnostic insight into areas of strength or weakness in the general education objective: Demonstrate Technology Competency. Results indicate that students' scored an average of 1.52 on the foundational IT concepts, 1.39 on capabilities: problem solving, critical thinking, and life long learning with IT, and 2.08 on skills in the use of IT. These sub scores are represented in Table 4.

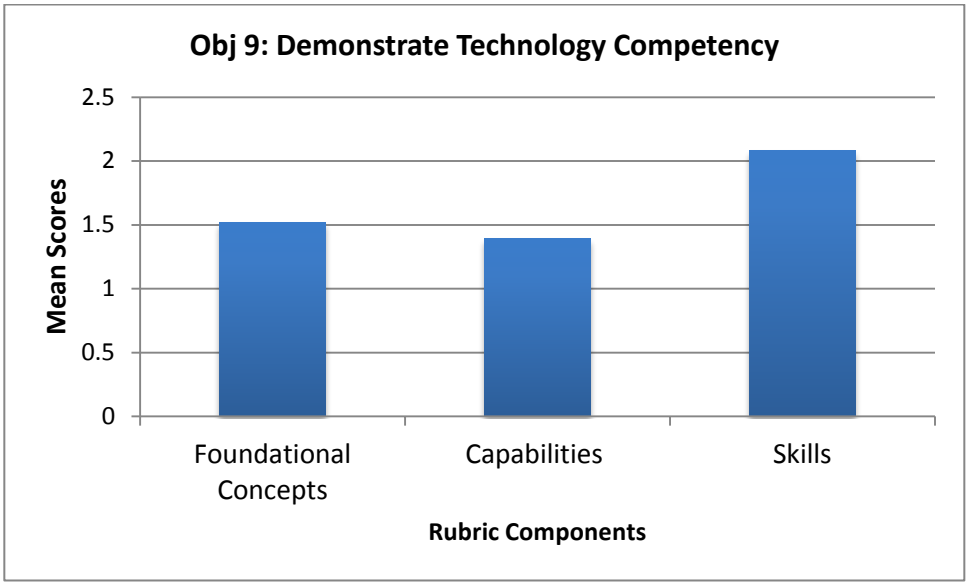

Figure 4. Average scores for each of the sub-categories rated for Objective 9: Demonstrate Technological Competency

Component	Mean	Stand. Dev
Foundational Concepts	1.52	0.64
Capabilities	1.39	0.59
Skills	2.08	0.46
Overall Mean	**1.53**	**0.63**

Table 4. 2013-14 Obj 9 sub-scores

Discussion

During the 25 February, 2014 and 11 March, 2014 meetings of the Assessment Advisory Group, the group discussed the results of this report. This discussion focused on the rubrics, scoring process, feedback from the faculty raters, and avenues for improving the general education assessment process at FSU.

The AAG was pleased with the results for the objective that was assessed – Locate, Evaluate and Apply Information. Analysis of the results revealed that a greater percentage of students scored higher than the mean while 25% of student scores were clustered on the upper scale of the rubric. However, the AAG, after examining the raters' comments, concluded that assessment results were not yet valid to speak to issues of student performance on the outcomes or the general education program itself. The discussion of results focused on the assessment process itself and with finding ways to align faculty approaches in the classroom with general education objectives. The recommendations of the AAG have been grouped into categories for meaningful consumption.

Artifact Collection

- Consider outreach opportunities to visiting lecturers teaching general education courses in order to increase the number of artifacts submitted for assessment.
- Determine the number of courses that are available for each objective. Only assess those objectives for which enough artifacts can be collected for adequate sample sizes.
- Discuss with the University Curriculum Committee and relevant departments on ways to increase the number of courses that can be used to assess currently under-represented objectives.

Norming Sessions

- Norming sessions need to be more focused on a common understanding of the rubric rather than discussion of the rubric and what does and does not work.
- These sessions need to clarify when raters should use a “0” or a “NA”.
- Consider longer or multiple sessions per group of raters.

Rating process

- Consider giving raters only artifacts from within their own disciplines.
- The Office of Assessment should consider pre-screening assignment prompts to help eliminate N/A artifacts prior to rating.

Curricular Review

- The AAG discussed at length the impact of the general education curriculum on the structure of assessment. It discussed the need that at some stage departments

should review the objectives associated with specific courses and that such a review should be periodic.

- The AAG also called for a review of the emphasis that each general education objective had in the curriculum. This information would be helpful is examining the effectiveness of the curriculum and also help inform assessment efforts.

Faculty development

- Professional development training particularly for instructors teaching general education-designated courses is imperative.
- The use of professional development would also address concerns that classroom work was not aligned with the institutional general education rubrics.

Rubric revisions

- Establish benchmarks for each rubric.
- Objective 7:
    - Make distinctions between 0-4 more precise.
    - Add descriptors to the 0-4 rating on the rubric.
    - Modify the rubric to ensure that all aspects of the objective are captured by the rubric.
- Objective 6:
    - Make outcome descriptions more explicit.
    - Add descriptors to the 0-4 rating on the rubric
    - Determine if the ethical and social responsibility aspects are both being represented equally in the rubric.

    - Test the rubric using artifacts from additional assignments to determine the breadth of its utility.
- Objective 9:
    - Split outcomes in order to make them more concise.
    - Seek feedback from departments on the outcomes and definitions of the rubric.
    - Add descriptors to the 0-4 rating on the rubric.

Framingham State University's commitment to student learning is evident in the resources and opportunities made available for assessment. This assessment exercise revealed that assessment is a process rather than a destination. Our task for the next cycle of assessment is clear: to continue to make improvements to our processes and rubrics with the goal of generating valid results that can inform student learning and our approach to general education at FSU.

APPENDIX A - SAMPLE INSTRUCTIONS FOR SUBMITTING ARTIFCATIONS

Dear Instructor:

As part of our commitment to improving student learning, and as required by NEASC, Framingham State University assesses samples of student work from across campus for the purpose of evaluating students' achievement of our general education learning objectives. We are now in year three of our assessment plan, and this semester we are collecting student work for the following general education objectives:

- Overarching Objective : Critical Thinking
- Objective 2 : Written Communication
- Objective 4: Human Diversity

The following course(s) that you teach have been designated as focusing on Gen Ed Objective

COURSE NUMBER **COURSE TITLE, SECTION**

We encourage you to submit student artifacts that focus on the above objective for the general education assessment process. The purpose of this assessment process is to evaluate students' achievement of general education objectives – not to evaluate individual instructors, courses, or departments.

This assessment process is entirely voluntary and confidential. Please see the confidentiality section below for steps taken to ensure confidentiality in the assessment and reporting processes. Samples may be submitted electronically or hard copy. We will be collecting samples through the end of this semester. Directions for submitting samples of student work are below.

Please contact Dr. Rebecca Shearman at rshearman@framingham.edu if you are willing to volunteer student artifacts for this process.

If you have any questions about the assessment process or confidentiality, please do not hesitate to contact either Dr. Rebecca Shearman or Dr. Mark Nicholas, Director of Assessment, (mnicholas1@framingham.edu).

Assessment of students' achievement of the general education objectives is a critical piece of our strategy for improving student learning at Framingham State University. Thank you for your consideration and time on this important project.

Sincerely,

Becky Shearman, Ph.D.

Assistant Professor, Department of Biology

DIRECTIONS FOR SUBMISSION OF ARTIFACTS

- For detailed directions on how to submit student work, please click: http://www.framingham.edu/office-of-assessment/documents/artifact-submission-guideline-spring.pdf

- For details on the general education assessment at FSU, pleas click the following link: http://www.framingham.edu/office-of-assessment/general-education.html

It is recommended that you inform your students that their work will be submitted confidentially for assessment of the general e0ducation curriculum. Sample text for student disclosure is available on the above website.

CONFIDENTIALITY

Appropriate steps will be taken to protect the students' and instructors' privacy. Your name and willingness to participate will not be shared with anyone. If you choose to participate, you may remove student, instructor, and course identifiers prior to submission of student work. If you do not remove identifying information, it will be removed by the Office of Assessment, prior to the assessment process.

Assessment scores will be reported at the institution level only. No identifying information about students or instructors will be reported and individual results will not be made available. Furthermore, no personnel actions will be affected by your decision to participate or not participate, and no record of participation or non-participation will be maintained.

ARTIFACTS BEST SUITED FOR GENERAL EDUCATION ASSESSMENT

- Written projects or papers of at least 2-3 pages, but generally not more than 10 pages
- Open inquiry assignments where students answer a question, decide what data to obtain, organize and present data to support a hypothesis or answer a question, or provide a conclusion or summary
- Individual student work
- Should be an assignment that is part of your undergraduate course in semester, Spring 2015 (please submit prior to grading)

ARTIFACTS NOT SUITED FOR GENERAL EDUCATION ASSESSMENT

- Fill-in the blank
- Multiple choice exams
- Presentations
- Student work written in a foreign language
- Note that assignments with these characteristics may work perfectly well in a course, but do not fit our general education assessment process (this does not mean they are bad assignments!)

Appendix C – FSU Institutional Rubrics

Objective 7: Locate, Evaluate, and Apply Information

Framingham State University

OFFICE OF ASSESSMENT

General Education Rubric OBJECTIVE: *Locate, Evaluate, Apply Information (pilot)*

OUTCOME	Rating					
	4	3	2	1	0	N/A*
Selection of appropriate sources	Demonstrates extensive diversity in source selection, and source type(s) is appropriate for the assignment. Excellent source selection that directly relates to the key concepts/thesis of the work.	Some diversity in source selection, and source type(s) is appropriate for the assignment. Most sources directly relate to the key concepts/thesis of the work.	Little diversity in source selection and some source types are not appropriate for the assignment. Some sources relate to the key concepts/thesis of the work.	No diversity in source selection and few source types are appropriate for assignment. Most sources do not relate to the key concepts/thesis of the work.	No diversity in source selection, and source type(s) is inappropriate for the assignment. Sources do not relate to the key concepts/thesis of the work.	Not applicable to the assignment.
Appropriate use of citations	Correct use of **All** strategies to access and use information ethically and legally: Use of citations and references. (including works cited list). Choice of citations and quotations are consistent. Distinguishes between common knowledge and ideas requiring attribution.	Able to use these strategies correctly: Use of citations and references (including works cited list). Choice of citations and quotations are sometimes inconsistent. Distinguishes between common knowledge and ideas requiring attribution	Able to use these strategies correctly: Use of citations and references but works cited page does not match up to citations. Distinguishes between common knowledge and ideas requiring attribution. Some in-text citations are used, but not all are appropriate.	Only direct quotes are cited or there is over-citing, meaning citing almost everything. Citations presented do not match works cited list. Information that needs to be cited is not cited. No citations are included at all. Represents work attributed to others has his/her own.	Work does not include any citations **or** works cited list, at all.	Not applicable to the assignment.
Evaluation	Demonstrates thorough (systematically and methodically) critical evaluation of relevant information. Identifies limitations or weaknesses, suggests alternatives and compares or contrasts with other sources.	Identifies limitations or weaknesses, suggests alternatives and compares or contrasts with other sources, but lacks systematic and methodical analysis.	Presents information with some discussion of limitations or weaknesses; suggests alternatives; compares or contrasts with other sources, but analysis is cursory and insufficient.	Presents information with little discussion of limitations or weaknesses; does not suggest alternatives; does not compare nor contrast with other sources.	Work does not demonstrate any evaluation at all.	Not applicable to the assignment.
Interpretation and synthesis of information	Adequate interpretation and synthesis of source information and provides student's original concepts, ideas or model.	Adequate interpretation and synthesis of source information but lacks student's original concepts, ideas or model.	Minimal interpretation and synthesis of source information, original concepts, ideas or models.	Provides only interpretation or synthesis of source information, but not both.	Work does not demonstrate any application of information at all.	Not applicable to the assignment.

***NOTE:** If the artifact is "not applicable" for all outcomes listed, then it is likely that the artifact is not appropriate for the assessment of this objective.
Faculty Members: Karen Druffel, Sandra Rothenberg, Becky Shearman
Last Revised: June 17, 2014 at norming session.

Objective 6: Recognize ethical and social responsibilities

Framingham State University

OFFICE OF ASSESSMENT

General Education Rubric OBJECTIVE: *Recognize ethical and social responsibilities (pilot)*

OUTCOME	Rating					
	4	3	2	1	0	N/A*
Ethical Self-Awareness	Provides detailed discussion AND analysis of both own core beliefs and origins of those beliefs.	Discusses in detail both own core beliefs and origins of those beliefs.	States both own core beliefs AND the origins of those beliefs.	States own core beliefs OR articulates the origins of those beliefs, but not both.	Does not state own beliefs or the origins of those beliefs.	Not applicable to the assignment.
Ethical Issue Recognition	Recognizes multiple ethical issues and their complexity AND understands the interrelationships among the issues.	Recognizes multiple ethical issues and their complexity, BUT has only a rudimentary understanding of the interrelationships among the issues.	Recognizes basic ethical issues BUT demonstrates only a rudimentary understanding of the complexity of those issues.	Recognizes basic ethical issues BUT does not understand the complexity of those issues.	Does not evidence recognition of ethical issues.	Not applicable to the assignment.
Understanding and Application of Ethical Perspectives/ Concepts	Provides accurate application of ethical perspectives/concepts to an ethical question AND considers the full implication of the application. Makes reference to relevant ethical theories.	Provides accurate application of ethical perspectives/concepts to an ethical question BUT does not consider the implications of the application. May reference ethical theories.	Demonstrates some understanding of ethical perspectives/concepts BUT does not include reference to ethical theories. Applies ethical perspectives/concepts to an ethical question BUT some of the application is inaccurate.	Demonstrates only rudimentary understanding and application of ethical perspectives/concepts to an ethical question.	Does not demonstrate understanding of ethical perspectives/concepts and does not apply ethical perspectives/concepts to an ethical question.	Not applicable to the assignment.
Evaluation of Different Ethical Perspectives/ Concepts	States a position and includes objections to, and assumptions and limitations of, the different perspectives/concepts, AND effectively incorporates them into decision making.	States a position and includes objections to, and assumptions and limitations of, the different perspectives/concepts BUT incompletely incorporates them into decision making.	States a position and includes objections to, and assumptions and limitations of, the different perspectives/concepts, BUT does not incorporate them into decision making.	States a position BUT does not include objections to, and assumptions and limitations of, the different perspectives/concepts.	Does not state a position.	Not applicable to the assignment.

***NOTE:** If the artifact is "not applicable" for all outcomes listed, then it is likely that the artifact is not appropriate for the assessment of this objective.

Faculty Members: Marian Cohen, Jeff Gao, Becky Shearman

Last Revised: August 7, 2013

Objective 9: Informational Technology Competency

Informational Technology Competency Rubric for Objective 9

Outcomes	4	3	2	1	0	N/A
Foundational IT Concepts	Adeptly demonstrates understanding of information technology with strong insight Fully demonstrates understanding of concepts, limitations, and implications of technology.	Effectively learns and demonstrates the use of technology with sufficient knowledge. Shows good familiarity with concepts, limitations, and implications of technology.	Demonstrates learning the use of technology with some knowledge, skill, or ability. Some familiarity concepts, limitations, and implications of technology.	Very limited demonstration of learning the use of technology with knowledge, skill, or ability. Poor understanding of the concepts, limitations, and implications of technology.	No demonstration of learning the use of technology with knowledge, skill, or ability. No demonstration of familiarity with concepts, limitations, and implications of technology.	
Capabilities: problem solving, critical thinking, lifelong learning with IT	Adeptly evaluates and selects digital tools based on the appropriateness to the specific task. Aptly applies concepts to solve problems.	Effectively evaluates and selects digital tools based on the appropriateness to the specific task. Effectively applies concepts to solve problems.	Limited evaluation of the tools used and appropriateness to the specific task. Limited application of concepts to solve problems.	Very limited evaluation of the tools used, and appropriateness for the specific task. Very limited application of concepts to solve problems.	Student was not able to properly evaluate the tools and appropriateness for the specific task. No application of concepts to solve problems.	
Skills in the use of information technology	Adeptly uses technology skills with advanced proficiency, using a variety of media and formats. Attempts to use new tools and apply technology in different ways for the purpose of the activity required.	Although effectively uses technology skills with adequate proficiency, the student does not use a variety of media and/or formats. Or overall, he/she could improve in one or more skill areas, or attempt to use tools in different ways for the purpose of the activity required.	Limited technology skills. Requires remediation to perform some basic tasks.	Very limited technology skills, and is not able to perform some basic tasks successfully.	Student was not able to use technology skills to accomplish tasks.	

***NOTE:** If the artifact is "not applicable" for all outcomes listed, then it is likely that the artifact is not appropriate for the assessment of this objective.
Faculty Members: Karen Druffel, Juliana Luna Freire, and David Keil
Last Revised: February 13, 2014