Looking Out and Looking In: Promoting Academic Success through Peer Review and Self-Reflection in Online and Face-to-Face Courses

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Abstract

- This presentation will illuminate why peer review and self-reflection are important in promoting academic success and student engagement in both online and face-to-face courses.
- It will showcase the effective and easy-to-implement techniques that the presenters use to provide students with opportunities to look outward and inward and how the results contribute to course grades and the overall assessment of student learning.
- Attendees will be able to incorporate these techniques into any course at any level.
The presenters have noticed a significant drop in student performance over the past few semesters and that many students seem to have disengaged from the learning process entirely.

Students seem stunned when their performance is assessed as insufficient and that a passing grade requires actually turning in assignments and participating in class.

This situation is particularly alarming because as students transition into graduate study or careers, they are ill-prepared for the rigors of this next phase of their lives.

Moreover, today’s disengaged and entitlement-minded student is tomorrow’s self-absorbed and apathetical citizen.
The presenters use peer review and self-reflection in several required core and elective courses in undergraduate bachelor's degree, minor and certificate programs. These courses range from 200-level logic and programming/application courses, which are taught in a face-to-face format, to a 400-level course on ethics and a 300-level course on security, which are both taught online. Their students are a mixture of traditional-age and returning/adult students and are diverse in terms of gender, race and nationality. The campus is part of a large and vibrant urban setting, which provides ample opportunities for student engagement and connections with the community.
Student Learning Outcomes

- In terms of the learning outcomes that the presenters wanted to their students to achieve:
  - 1) students being more engaged in their courses,
  - 2) students taking more responsibility for their own learning as well for the overall learning experience in the course as a whole,
  - 3) increased interaction between students, especially in online courses
  - 4) giving students the opportunity to fairly and objectively critique their own work and participation as well as become skilled in providing useful feedback to others and
  - 5) for students to have a more realistic view of their performance in courses throughout the semester.

These outcomes contribute to a more collaborative learning environment where active learning is both encouraged and expected.
The presenters have implemented a combination of techniques to provide both formative and summative feedback to students so that students are more actively engaged in their own learning and have a clearer view of their performance and what is required to achieve excellence in these courses.

The presenters have determined that the most impactful techniques are self-reflection and peer review, including the use of pre-tests and post-tests, team projects, online discussion forums and oral presentations where students grade and provide feedback to each other, which is consistent with other findings.

The presenters will review the performance in their courses over time to see whether what they have implemented has impacted participation, grades and student satisfaction.
Group Project Rubric

- Team Projects – in INFO I210, INFO 211, INFO I421

- In INFO I421, groups of 3–4 students:
  - Identify a real client outside of the school and interview the client about his/her database management needs
  - Design a system that supports the needs of the client
  - Build the database management application
  - Document the project
  - Present their project in four stages to the entire class
  - Conduct a peer review of each other
  - Faculty member grades the team, but adjusts it based on peer review information from the students on that team
Group Project Example

Welcome to KUNG FU PANDA Media Library!

This application is designed to demonstrate the popular software design pattern named MVC. The application hosts four different medium objects: movie, book, music cd, and game. The movie library is complete. The partially completed book, cd, and game libraries are to show how easy it is to host additional medium objects. The application is meant to be flexible and extensible.

Major features include:

- List all media
- Display details of a specific medium
- Add new medium
- Update or delete an existing medium
- Search media by words in title
- Autosuggestion implemented with AJAX
- Filter media
- Sort media

Click an image below to explore a library. Click the logo in the banner to come back to this page.
## Group Project Rubric

### I211 Information Infrastructure II

#### Peer Evaluation Form

The purpose of this form is for you to evaluate contribution made by each of your group members to the overall performance and success of your group's project. In making your assessments, please take into account following items:

- Item 1: The member contributed fair share of workload.
- Item 2: The member made good quality of contribution.
- Item 3: The member was reliable and well prepared for group meetings.
- Item 4: The member met deadlines set forth by the team.
- Item 5: The member showed great degree of cooperation with other group members.

Do not rate yourself. Rate other group members using a one to five point scale. Use the table below to record your ratings. Use one column for each member. **Your ratings will not be disclosed to other students.** Be honest in this evaluation!

(5=strongly agree, 1=strongly disagree)

<table>
<thead>
<tr>
<th>Name</th>
<th>Item 1</th>
<th>Item 2</th>
<th>Item 3</th>
<th>Item 4</th>
<th>Item 5</th>
<th>Total points (25 maximum)</th>
</tr>
</thead>
<tbody>
<tr>
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Additional comments: 

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Self-Reflection in INFO 1201

- On a weekly basis
- Each student evaluates his/her class participation using a template (see next slide)
- Students give themselves a score on engagement, attention and behavior of between 0 and 4
- Faculty member reviews the student scores and then adjusts as needed based on the criteria and the faculty member’s own observations
Self-Reflection in INFO I201

Class Participation Self-Evaluation

INFO I201

Learning is not a passive process. All learning requires active participation. Participation is required in this course and is worth 10% of your course grade. Your participation is assessed in the following areas in addition to your attendance. Use the scoring guide below to give yourself a class participation grade for this week’s classes. Your instructor will also assess your participation using the same rubric. Your self-evaluation scores will be used as a reference when your class grade is determined by your instructor.

Name ___________________________ Date ___________________________

<table>
<thead>
<tr>
<th></th>
<th>Developing, but below expectations (0 – 2 points)</th>
<th>Accomplished/Meets expectations (3 points)</th>
<th>Exemplary/Displays leadership (4 points)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>I infrequently or never contribute to class discussion, ask any relevant question, or respond to others’ questions.</td>
<td>I contribute to class discussion, ask relevant questions, or respond to others’ questions at least 2 times in each class.</td>
<td>I proactively and regularly contribute to class discussions, ask relevant questions, or respond to others’ questions 3 or more times in each class.</td>
<td></td>
</tr>
<tr>
<td>Attention</td>
<td>I sometimes do not pay attention/respectfully listen to my instructor or peers.</td>
<td>I rarely fail to pay attention/respectfully listen to my instructor or peers.</td>
<td>I actively and respectfully listen to my instructor and peers and maintain full engagement throughout class.</td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>I sometimes display disruptive or inappropriate behavior in class. I sometimes use my smart phone or laptop to conduct course unrelated activities.</td>
<td>I rarely display disruptive or inappropriate behavior in class. I never use my smart phone or laptop to conduct course unrelated activities.</td>
<td>I never display disruptive or inappropriate behavior in class. I never use my smart phone or laptop to conduct course unrelated activities.</td>
<td></td>
</tr>
</tbody>
</table>
By Sunday, September 28 at noon, please respond to the Discussion Forum questions for Module 5 (Please note which Discussion Forum questions you are responsible for—either the odd-numbered or the even-numbered Modules):

- **Go to the responses for the Discussion Forum questions for Module 4. Select one student’s response. Please comment on this response. How did this student address values and ethics from a cultural perspective in his or her response? What is one takeaway point from this student’s response? What other issues need to be considered? Please include this as part of your response in the Discussion Forum for Module 5, rather than as a Reply to the student.**
- How does the author apply the various theories of ethical decision-making to spam? Does he find spam wrong from an ethical or legal standpoint and do you agree with his analysis? Should more be done to discourage spam and if so, what? Or should people be expected to protect themselves from spam?
- How does use of the Internet make people more vulnerable to a variety of unethical and even illegal behaviors? Should more be done to discourage this behavior and if so, what? Or should people be expected to protect themselves? Are there other illegal or unethical behaviors on the Internet that were not covered in Chapter 3 of Ethics for the Information Age and if so, what are they?
- Discuss censorship and freedom of expression in the context of the Internet. How much control should governments have to be able to restrict access or regulate the content of what is available? Has the tendency for greater government control increased over the last decade and if so, why?
- Select one of the threats to children caused by networked communications that is discussed in Chapter 3 of Ethics for the Information Age. How would you apply the various theories of ethical decision-making to this threat? What is the response from government or the law to this threat and is it effective? What other rights are impacted by action from the government or by the laws intended to address this threat?
- Any other surprising or interesting points from Module 5 or the reading assignment.

Please listen to a Fireside Chat (using the Podcasts link in OnCourse).

Module 5: Summary of Major Points
Students complete a “Pre-Test” at the beginning of the semester, which is a survey of their views on a variety of potentially unethical or illegal behaviors, and complete the same “Post-Test” at the end of the semester.

Final assignment is comparing responses in the Pre-Test with those in the Post-Test to identify similarities and differences.

Provide an opportunity to see how much student views have changed during the semester and to think about why.

Shows the impact of the course on students’ views about behaviors they may encounter in their careers.
Self-Reflection in an Ethics Course

453 Computer and Information Ethics
Self-Reflection on Computer and Information Ethics
Due Monday, May 5, 2014, 5:00 p.m.
30 points

Corresponds to PULa 6 [Values and Ethics], 5 [Understanding Society and Culture] and 2 [Critical Thinking]

Step 1: Access your responses to the Pre-Test on Computer and Information Ethics and the Post-Test on Computer and Information Ethics through the Tests & Surveys link in OnCourse.

Step 2: Carefully compare your responses to the questions on the Pre-Test and Post-Test to see how your responses changed during the semester.

Step 3: Write a paper where you reflect on your responses:
1. Select three (3) questions where your response to the question did not change or changed only slightly or changed the least between the Pre-Test and the Post-Test.
   • What was the situation or scenario presented in the question?
   • Explain why your response to that situation or scenario did not change or changed only slightly or changed the least between the Pre-Test and Post-Test.
   • What other information or considerations might have influenced your response?
2. Select three (3) questions where your response to the question changed in a more significant way or changed the most between the Pre-Test and Post-Test.
   • What was the situation or scenario presented in the question?
   • Explain why your response to that situation or scenario changed in a more significant way or changed the most between the Pre-Test and Post-Test.
   • What other information or considerations might have influenced your response?
3. As a whole, did your responses to the questions trend more harshly (finding the behaviors in the questions more likely to be illegal or unethical) or more liberally (finding the behaviors in the questions more likely to be ethical or acceptable) from the Pre-Test to the Post-Test?
   • If so, what accounted for your revised views?
   • If not, why did your views not show a trend in one direction or the other?
4. Do you believe that you are prepared to address the ethical situations that you might be confronted with as an information professional, an IT professional or a professional in whatever career field you are pursuing? Why or why not?
5. What other information/training/resources would be helpful in preparing you for making ethical decisions in your career? Please provide some suggestions.

Please submit your assignment as a Word, word processing or PDF document. Please use the Assignments link in OnCourse.

Tipster says, “Good luck and have a wonderful summer!”
Peer Review in an Ethics Course

Step 3: Confer and Report

I have arranged students into four groups. Before the due date, please confer with the members of your group, preferably in real time (in person, by telephone, using synchronous technology), but it could also be by email. Select two scenarios (2) and discuss them together. One student in your group should act as the note-taker. On behalf of his/her group, the note-taker should submit responses to the following questions - please list all student names on the document. (Each scenario is worth 3 points, for a total of 6 points for Step 3.)

1. Scenario No: _______ (Note-taker: please indicate.)
2. Take a vote on whether the act, activity or behavior in the scenario is:
   - [ ] Unethical?
   - [ ] Not unethical?
   - [ ] No ethics issue?
   The note-taker should record the vote.
3. Discuss the vote and students should share their views about the scenario.
4. The note-taker should summarize how the students in the group viewed the act, activity or behavior in the scenario and reasons for the similarities and differences in points of view.
For More Information

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