A Carrot or a Stick: Enhancing Student Motivation through Accountability in Online in Face–to–Face Courses

Dr. Sara Anne Hook and Dr. Liugen Zhu
School of Informatics and Computing, IUPUI
Abstract

- This engaging presentation features a variety of innovative and practical teaching strategies that are intended to increase student accountability in online and face-to-face courses.
- Based on their assessment methods and drawing from the literature, the presenters demonstrate how student accountability has a direct impact on extrinsic and intrinsic student motivation that translates into improved student learning and academic success.
Over the past few semesters, the presenters have noticed a significant drop in student performance in their courses and discovered that this observation is not unique after conferring with their colleagues and academic advisors.

Many students seem to have disengaged from the learning process entirely.

Some students are stunned when their performance is assessed as insufficient and even become irate 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 and they do not have the requisite skills of self-regulation and personal responsibility.
Traditional Extrinsic and Intrinsic Motivations

- The traditional extrinsic forms of positive motivation in courses (“the carrot”), such as good grades, high GPAs, awards and recognition, no longer seem to be enough to encourage students to do more than the bare minimum towards their course requirements.
- On the other hand, traditional extrinsic forms of negative motivation (“the stick”), such as the threat of poor grades, probation, dismissal and loss of future graduate study opportunities, do not seem effective with the current generation of college-age students.
- The intrinsic motivations of simply learning to learn and the pleasure of the learning process appear to be lacking in the current climate of sound bites, multi-tasking and instant gratification.
Student Motivation and Academic Success: What is Missing?

- The literature supports the relationship between motivation and student performance and addresses some of the factors that promote or detract from motivation.
- Yet there is still a gap or disconnect between student motivation and academic success.
- The presenters determined that what is needed is to move beyond student motivation to student accountability as a way to improve student learning and academic success and to overcome the prevalent attitudes of apathy and entitlement.
Accountability can thus serve as both a carrot and a stick in terms of motivating students and can be used to both pull and push students forward.
Increasing Student Accountability

- The presenters have implemented a combination of techniques, representing both carrots and sticks, to make students more accountable to themselves and to their peers so that students are both extrinsically and intrinsically motivated and are more actively engaged in their own learning.
- Some of the outcomes they want to see in their courses overall are for:
  - 1) students to be more motivated to do more than the minimum in their courses,
  - 2) students to take more responsibility for their own learning as well for the overall learning experience in the course as a whole,
  - 3) students to have the opportunity to fairly and objectively critique their own course work and participation as well as become skilled in providing useful feedback to others and
  - 4) students to gain a more realistic view of their performance in courses throughout the semester and correct their behavior if necessary.
Techniques Used

- Group Projects and Presentations
- Self-Reflection
- Peer Review
- Exemplars
- Midpoint Self-Assessment – new
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.

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### I211 Information Infrastructure II

**Peer Evaluation Form**

The purpose of this form is for you to evaluate the 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>
</tr>
</thead>
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**Total points (25 maximum)**

<table>
<thead>
<tr>
<th>Additional comments</th>
</tr>
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</table>
Group Activity to Boost Submission of Assignment to 100% in 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.
Self–Reflection in INFO I201

- 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 1201

### Class Participation Self-Evaluation

**INFO 1201**

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.

<table>
<thead>
<tr>
<th>Name __________________________</th>
<th>Date __________________________</th>
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<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><strong>Engagement</strong></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><strong>Attention</strong></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><strong>Behavior</strong></td>
<td>I sometimes display disruptive or inappropriate behavior in class. I sometimes use my smartphone or laptop to conduct course unrelated activities.</td>
<td>I rarely display disruptive or inappropriate behavior in class. I never use my smartphone or laptop to conduct course unrelated activities.</td>
<td>I never display disruptive or inappropriate behavior in class. I never use my smartphone or laptop to conduct course unrelated activities.</td>
<td></td>
</tr>
</tbody>
</table>
Self–Reflection in the Ethics Course

- 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 PULs 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!”
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
The presenters also promote intrinsic motivation through providing exemplars of many of the projects and homework assignments that students will be expected to complete throughout the semester at the very beginning of the course or well before the due date.

Rather than “giving away the answer”, the projects and homework assignments are unique enough that each student will be required to showcase his or her individual skills and effort.

Providing exemplars not only helps students to differentiate between work that is worthy of an A versus minimum efforts, but they also revise a student’s own internal view of what it means to be excellent and what he or she should strive for.
Exemplars demonstrate the skills that students will be learning in their courses and how these skills translate into real-world applications that will be part of a student’s future career, which is a significant intrinsic motivator.

Students whose work is selected as exemplars are thus honored and rewarded in front of their peers, but examples of work that has been recognized as setting a standard for excellence also becomes part of the student’s professional portfolio, which is now expected for many careers as well as for admission to graduate programs in a number of disciplines.
USA State Capitals Game

This game is powered with AJAX: a technology promising better user experiences.

Instructions: This simple game tests your knowledge of US State Capitals. The computer randomly choose a State. You type the Capital of the State into the text box. The computer evaluates your answer automatically. Your answers are case insensitive. You earn 2 points for each correct answer. To skip a State, press the "Skip State" button or simply hit the "Enter" key. The game is timed and 5 minutes are all you have. Click the "Start" button to start the game now.

Important Note: Your browser must accept cookies for the game to work properly. The cookie is temporary and is destroyed when you exist the game.

BE QUICK. BE SMART
Creating the Kung Fu Panda Media Library application
Kung Fu Panda Media Library!
An interactive application designed with MVC pattern

Movie Details
Title: The Shawshank Redemption
Rating: R
Release Date: 1994-10-14
Director: Rob Reiner
Description: Two prisoners bond over a number of years, finding solace and eventual redemption through acts of common decency.

Add Movie
Title:
Rating: G PG PG-13 R
Release Date: yyyy-mm-dd
Director:
Image File: (include file extension, e.g. .jpg, .png)
Description:

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Midpoint Self-Assessment as a Measure of Accountability

- Rather than assess the course at midterm time, the presenters turned the situation around by having students assess their own performance in the course at midterm time, which puts the accountability on the students.
- By doing a midpoint self-assessment, students are able to identify the weaknesses in their behavior that are undermining their performance in the course so that they can choose to make a commitment to alter these behaviors during the second half of the semester.
- This provides intrinsic motivation for students to recognize and change their behavior without the teacher’s intervention through either reward or punishment.
- The presenters have tried this in Spring 2015 in several of their courses and the results have been positive.
- Presenters received feedback that students like this technique.
- This also provides the presenters will documentation that students identified how they needed to improve their course grades and participation in the remaining weeks of the semester.
Sample Midpoint Self-Assessment Questions

- I have reviewed the PowerPoint slides after each lecture.
- I have completed all readings assigned each week.
- I have been well-prepared for all quizzes.
- I have attended tutoring sessions when I needed help with my labs.
- I have contacted my instructor when I needed help.
- I have a plan each week for how I will complete all my work in this course.
- So far I am happy with my performance in this course.
- I read the feedback that my instructor or TA have provided for my labs.
- I have not missed a single class session this semester.
If you would like a copy of the full set of questions for the Midpoint Self-Assessments we used this semester, please contact us.
Results of the Midpoint Self-Assessment

- Interesting Results and Insights from the Midpoint Self-Assessment
  - Sara
  - Louie

- How we can use this data this semester
- How we can use this data in the future
For More Information

Dr. Sara Anne Hook, sahook@iupui.edu
Dr. Liugen Zhu, louizhu@iupui.edu
School of Informatics and Computing, IUPUI