



GREAT Expectations: Promoting Active and Collaborative Learning in Online and Face-to-face Courses

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Abstract



- ▶ GREAT Expectations stands for:
 - Group work
 - Reflection
 - Evaluation of self and peers
 - Application of course content to real-world problems
 - Testing (pre- and post-testing)
- ▶ GREAT Expectations encompasses all of the techniques and technologies that the presenters use to promote active and collaborative learning in their online and face-to-face courses and to encourage students to take more responsibility for their own learning.

Teaching Problem Addressed

- ▶ The challenge that the presenters face is how to encourage active and collaborative learning in an undergraduate degree program that is comprised of a wide range of courses and a diverse student population.
- ▶ The presenters teach face-to-face and online required and elective courses that are part of this degree and they have used a number of techniques and technologies to promote student engagement so that students are more than just passive recipients of course content and are motivated to do their best work.
- ▶ The presenters also believe that students who are more responsible for their own learning and who participate fully throughout the semester will have a more realistic view of their performance in the course and what it takes to achieve excellence.
- ▶ This has the added benefit of helping to combat unrealistic expectations and an entitlement attitude about grades and addresses the tendency towards grade inflation in courses.

Relevant Conceptual/Theoretical Underpinnings

- ▶ Research suggests that learning that emphasizes understanding and the acquisition of knowledge requires the active and engaged participation of the learner.
- ▶ Active and collaborative learning can increase levels of student satisfaction, engagement, connectedness, and attainment of course content – all of these promote student success.
- ▶ This is especially important in online courses, which already lose some of the personal connection between faculty and students and the sense of community among students.
- ▶ Moreover, the literature also reveals a significant disconnect between actual academic performance and the grades that students expect to receive as well as an entitlement view that supports a passive approach to learning.
- ▶ Self-reflection and peer evaluation also promote important “soft skills” that students need to learn, such as the ability to work in teams, to meet deadlines, and to be able to give and receive constructive criticism that focuses on the work that has been done rather than on personal characteristics.

Assessment Measures Used

- ▶ The presenters use a combination of techniques and technologies to provide both formative and summative feedback to students so that students are actively engaged in their own learning and have a clearer view of their performance and what is required to achieve excellence in their courses.
- ▶ Among these assessment methods are self-reflection, peer evaluation, pre-tests and post-tests, team projects and oral presentations where students grade each other.
- ▶ In terms of self-assessment, preliminary results indicate that students tend to be honest to almost harsh in evaluating their own participation in class on such elements as engagement, attention and behavior.
- ▶ Moreover, peer evaluation provides an opportunity for more regular and robust feedback throughout the semester beyond what the faculty member can provide, especially in larger classes.
- ▶ 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.

“G”: Group Work

- ▶ 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

“R”: Reflection (Self-Reflection)

- ▶ In INFO I453, students complete a Self-Assessment on Professional Ethics, where they respond to scenarios of potentially unethical and/or illegal behavior
- ▶ Students then compare their responses to those of a panel and reflect on how their responses were similar or different and why
- ▶ Likewise, the Pre-Test and Post-Test on Computer and Information Ethics results in students comparing their responses from the beginning of the semester with the end of the semester and reflecting on what has changed and why
- ▶ In Discussion Forum questions (all online courses), students are asked about their experiences and views related to the weekly course content

“E”: Evaluation of Self and Peers

- ▶ Evaluation of Self (in INFO I201):
 - On a weekly basis
 - Each student evaluates his/her class participation using a form (see handouts)
 - 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
- ▶ Evaluation of peers in Final Project (INFO I210, I211 and I421) and incorporated into student grade on the project

Evaluation of Self and Peers

- ▶ In online courses, there is a weekly Discussion Forum
- ▶ Class is divided in half
- ▶ Half of the class responds to the Discussion Forum questions for the odd-numbered Modules
- ▶ The other half responds to the Discussion Forum questions for the even-numbered Modules
- ▶ The first question each week requires to review the responses to the Discussion Forum questions for the previous Module and provide feedback to one of the students
- ▶ Thus, students receive more feedback than just from the faculty member and the TA on a regular basis
- ▶ This also incentivizes students to provide thorough and thoughtful responses in a timely manner, increasing their chances for feedback from other students

“A”: Application of Course Content to Real-World Problems



Creating the U.S. State Capitals game in INFO I211

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 https://www.indiana.edu/~i211/kungfupanda_mvc/ Thursday, March 27, 2014

KUNG FU PANDA Media Library!

An interactive application designed with MVC pattern

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 b




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Movies in My Library

Search movie by title: Go

Include: ☒ G ☒ PG ☒ PG-13 ☒ R Refresh

Title	Rating	Release Date	More Information
The Shawshank Redemption	R	1994-10-14	More about The Shawshank Redemption
The Godfather	R	1972-03-24	More about The Godfather
The Godfather II	R	1974-12-20	More about The Godfather II
The Dark Knight	PG-13	2008-07-18	More about The Dark Knight
Inception	PG-13	2010-07-16	More about Inception
Chocolat	R	2001-01-19	More about Chocolat
Raiders of the Lost Ark	PG	1981-06-12	More about Raiders of the Lost Ark
Life is Beautiful	PG-13	1999-02-12	More about Life is Beautiful
Aladdin	G	1992-11-25	More about Aladdin
Secret of the Wings	G	2012-08-16	More about Secret of the Wings

[Add new movie](#)

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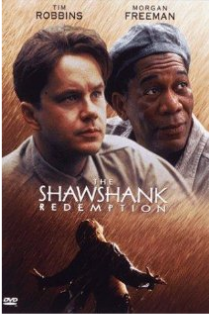
Creating the Kung Fu Panda Media Library application

11 Supplemental V x Movie Details x
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Movie Details Search movie by title: Go



Title: The Shawshank Redemption
Rating: R
Release Date: 1994-10-14
Director: Ric Roman Waugh
Description: Two imprisoned men bond over a number of years, finding solace and eventual redemption through acts of common decency.

[Back to movie list](#)

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Add Movie Search movie by title: Go

Title: *

Rating: ☒ G ☐ PG ☐ PG-13 ☐ R

Release Date: * (yyyy-mm-dd)

Director: *

Image File: * (include file extension. e.g. .jpg, .png)

Description:

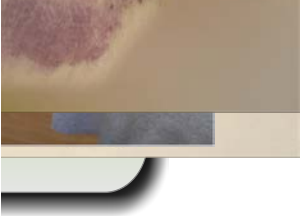
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Creating an accident reconstruction in INFO I470



Creating a timeline in INFO I470



“T”: Testing (Pre- and Post-Testing)

- ▶ In INFO I453 Computer and Information Ethics, students complete a “Pre-Test on Computer and Information Ethics” at the beginning of the semester, which is a survey of their views on a variety of potentially unethical or illegal behaviors
- ▶ Students complete the same survey at the end of the semester
- ▶ Final course assignment is to compare responses in the Pre-Test with those in the Post-Test, to identify similarities and differences and to explain the reasons for these similarities and differences
- ▶ Provides an opportunity for students to see how much their 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



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