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Using Technology to Enable Lightweight Teams

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What are we talking about today?
- Defining a "lightweight team"
- Benefits of lightweight teams
- Using tech to enable lightweight teams
- Wrap-up

What is a Lightweight Team?
- Mary’s Definition:
  - Students are working together BUT
  - Each is responsible for his or her own deliverable
- Example: iPhone app
Why would I want to do this?

- Dilemma of using projects as a summative assessment
- Example: A multiple-choice exam doesn’t measure a course outcome like “build an iPhone app”
- But group projects don’t show all students accomplished outcome
- Why? Free riders spoil the show!

Benefits of Lightweight Teams

- Meeting the college core competencies:
  - collaboration and communication
  - critical thinking
  - Moving higher on Bloom’s taxonomy from recognizing concepts to creating new work
  - Adding good stuff to the student’s portfolio
  - Getting rid of those pesky free riders and team squabbles

Sample Project Structure:

Building an iPhone App

Team Deliverables
- Brainstorming Session
- Requirements Document Review
- Stand-Up Meetings
- Code Review
- Final Presentation
- Peer Review

Individual Deliverables
- Requirements document
- Rough draft of app code
- Final app

Sample Project Structure:
Sample Project Structure: Writing a Lit Review

**Team Deliverables**
- Brainstorming Session
- Discussion on articles in bibliography
- Review rough draft
- Peer Review

**Individual Deliverables**
- Bibliography
- Rough draft of lit review
- Final draft of lit review

Using Tech to Enable Lightweight Teams

- Video Introductions: iMovie, Jing, or WeVideo
  - Instructor introduces project
  - Students introduce themselves to each other

Let’s look at an example . . .

Using Tech to Enable Lightweight Teams

- Brainstorming project ideas:
  - D2L chat and Dropbox (aka “Assignments”)
  - Review Rough Draft of Requirements Document
  - D2L Discussion Boards and Word “Track Changes” feature
Using Tech to Enable Lightweight Teams

- Stand-Up Meetings
  - Virtual meetings in D2L chat
- Code Reviews
  - Code review worksheet
  - D2L discussion board, chat, and dropbox
  - Instructor code-walk through videos – Jing or QuickTime
  - Let’s look at an example of a code review worksheet . . .

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ITEC2505 Objective-C Programming

Example Code Review Worksheet

Coding Challenge #9

Name of reviewer: Tom Baker
Name of developer being reviewed: Patrick Stewart

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functionality</td>
<td>Exceptional</td>
<td>The code meets the functionality described in the coding challenge assignment. If a specifications document is required for the assignment, the code also meets the functionality described in the specifications document.</td>
</tr>
<tr>
<td></td>
<td>Acceptable</td>
<td>The code mostly meets the functionality described in the coding challenge assignment. If a specifications document is required for the assignment, the code mostly meets the functionality described in the specifications document.</td>
</tr>
<tr>
<td></td>
<td>Amateur</td>
<td>The code is partially completed, and does not meet the functionality described in the coding challenge assignment. If the assignment requires a specifications document, the code may not meet the functionality described in the specifications document or the document is not submitted with the code.</td>
</tr>
<tr>
<td></td>
<td>Unsatisfactory</td>
<td>The code cannot be tested as it is unknown if it meets the functionality in the coding challenge assignment.</td>
</tr>
</tbody>
</table>

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Using Tech to Enable Lightweight Teams:

Presentations

- Tech Aspects
  - Prezi, narrated PowerPoint, WeVideo or iMovie
  - Discussion board for comments
- Advantages
  - Avoids burn-out – students watch at home
  - Injects creativity
  - Practice for business world
  - Universal design for disabilities and abilities

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So, Does it Work?

- No epic fails since introducing the process
- Students more enthusiastic about projects
- More diversity of projects
  - Students free to cross-build on skills from other courses
  - Example: Unity game in Android apps course

Wrap-Up

- Use tech a la carte
- No piece of software is a silver bullet
- Sometimes simpler is better
- Tech should support not distract
- Bye, bye free riders!

Tech Resources

- Prezi for Presentations: www.prezi.com
- Jing by Techsmith: https://www.techsmith.com/jing.html
- iMovie (free for Macs and iPads purchased in 2013 or later): Free download in the App Store
- Screencast-O-Matic: https://screencast-o-matic.com/home
- WeVideo: https://www.wevideo.com
- Good old D2L aka BrightSpace or Blackboard