Strategies for Improving Student Collaboration in the PBL Classroom

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Have conducted workshops on the use of collaborative technology in India, Turkey, Peru, Taiwan, and the U.S.
Research interests include trust in electronic commerce and the use of collaborative technology to improve student learning.
My academic background:
- Degrees
- Teaching

But…
- I can’t figure out 90% of the functions on my cell phone
- My 14-year old son figured out how to hook up my home theater system.
On the Other Hand...

- Our new Nintendo Wii offers opportunities for us as a family
- My iPod helped me pass the time on the flight
- My phone allows me to stay in touch with my family
- Frustrations, quality of life
Those frustrations also occur when we teach.
The only time you should use technology:
• Enhances learning
• Helps achieve learning objectives.
What technologies have a high benefit yet low barrier to entry?
What is Collaboration Software?

- Very broad
- Enables people to work together better
- Software that facilitates the development or improvement of a common deliverable

Examples:
- Email
- Wikis
- Videoconferencing
- SharePoint
- Instant Messaging
Think, Pair, Share

Take 5 minutes to discuss:
What technologies do you use to collaborate in your student teams?
What are their strengths and weaknesses?
Our Focus in this workshop

- **Wikis**
  - You and your teammates will use a wiki to create a web-based position paper either favoring or opposing controversial topic

- **SharePoint**
  - Collaboration software that facilitates team project management
  - Produced by Microsoft
  - Utilizes document repositories, task creation and assignment, and basic calendaring and scheduling of team activities.
Strategies for Improving Student Collaboration in the PBL Classroom
• **Wiki** versus **Wikipedia**
• All Wiki users have an inherent right to change anything on the page.
• Along with this right comes an expectation of mutual respect and trust—i.e., that participants will create an effective product that reflect multiple perspectives.
• One of the founders of Wikipedia once stated, “The only way you can write something that survives [in a Wiki] is that someone who’s your diametrical opposite can agree with it.” In other words, don't dictate—collaborate!
What Is a Wiki?

- Web-based authoring tool
- Emphasis on simplicity and productivity
- Easy to Use and Learn
- Doesn’t require a lot of server resources
- Dynamic content
- Community spirit of collaboration
- Most wikis automatically track versions
Let’s See What a Wiki Can Do...

- Please bookmark the following site:
  - ID: colima
  - PW: pbl

- Read:
  - “The Wiki Philosophy”
  - Advantages of Using a Wiki
  - Suggestions on Using a Wiki
Can Wikis Encourage Student-Centered Learning?

**Evaluation** - make a judgment based on criteria

**Synthesis** - produce something *new* from component parts

**Analysis** - break material into parts to see interrelationships

**Application** - apply concept to a *new* situation

**Comprehension** - explain, interpret

**Knowledge** - remember facts, concepts, definitions
Journal Reviews require analysis, synthesis, and evaluation.
Can wikis provide that same level of intellectual stimulation?
Advantages of Wikis

- Simple to use and understand
- Can create a web-based resource for future classes
- Require students to think about how to improve existing content as well as integrate new content
Wiki Disadvantages

- Simple format
- Best for quickly developing web-based content
- Decentralized control: everyone can change everything!
Where can you get a wiki?

- PBWiki
- Wikidot
- SharePoint 3.0
SHAREPOINT

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What Is SharePoint?

- Server-based tool created by Microsoft
- Focus is on team collaboration and project management
- Features
  - Document Repository
  - Task List
  - Picture Archive
  - Team Announcements
Let’s See What SharePoint Can Do….

- Go to your original team wiki page. Highlight and copy the site’s content (Ctrl-C)
- Go back to the Workshop SharePoint Site
- Go to Shared Documents; Open Your Team’s Folder
- In your team folder, create a new Word document (New→New Document)
- Paste the wiki document into Word
- Save (Ctrl-S) the document!!!!!! ←Don’t forget to do this step.
- Make the document look more professional by changing fonts, adding clipart.
- Save each time you make a change. IMPORTANT!!!!!
Do Some Project Planning

- In SharePoint, go to the Calendar View (left navigation bar)
- Your team should add the following:
  - Calendar: Pick a date in January. Add a team meeting (New → New Item)
  - Tasks: Create a task that a team member must complete by a certain date
  - Team Discussion: Post a response to the team discussion question.
Wikis versus SharePoint

- **Wikis**
  - Best used for development of web-based content.
  - Great when you need to develop content quickly.
  - Web-based approach means no software needed.

- **SharePoint**
  - Dedicated server needed with IT support staff.
  - Great for project management, organize documents, assign tasks.
How Can I Use a Wiki?

- **Students:**
  - Master’s or doctoral review notes for exams
  - Resource page for each class
  - Team resource site to develop project deliverables

- **Business People:**
  - Improved Knowledge Management
  - Documentation of individual job knowledge
  - Dynamic content development
  - Documentation of job responsibilities
  - Develops employee empowerment & mutual trust
Selection of Technology for Class

- Usefulness—Does it achieve your class’ learning objectives?
- Ease of Use—Does it reinforce the concepts, or create barriers to learning?
- Acceptability—Students will accept the technology and use it on their own.
- Cost—Can the university and students afford the technology?
Thoughts and Questions?