Building Community Through Online Collaborative 'Class Answers' to Student Questions Julia Kregenow (jmk50@psu.edu) and Steve Van Hook (sjv11@psu.edu)

Why we use piazza.com

- It's a Q&A forum, first and foremost. Superior to Angel for this.
- Also offers most features needed for a course website (everything but grades).

Benefits of using piazza

- It's free, intuitive for students to use, works on any web browser, and has a nice iPad/iPhone/Android app (also free).
- It's better than student Facebook "answer" groups -- allows instructor to be part of the conversation; provides some oversight. (It usually doesn't eliminate the Facebook group, but it does provide the students who know better than to get answers off Facebook a place where they can have productive discussions.)
- It keeps questions organized: folders, tags, easy searching, marking duplicates.
- The "wiki" nature is great (in principle) to foster collaboration on one high-quality "class answer", and keeps answers compact and easy to read.
- Answers endorsement offers quality control, and gives students a nice pat on the back.
- Option to post anonymously to peers creates safe environment.
- Overall, much higher student engagement than other discussion forums.

Piazza vs. Angel

Some features are shared by both:

- posting documents and resources for class, e.g. sample exams, HW solutions, reading guides, lecture notes, etc.; "categories" option
- syllabus, instructor info, and other basic course info
- announcements
- emailing your class
- students can upload images and links in their posts
- rich text editor and/or type html code yourself
- option to create smaller discussion / project groups

Only in piazza:

- Wiki nature
- Organization of posts
- Students may post anonymously to peers but not instructor
- "Study groups" feature, where students can initiate an open request to whole class (but we tend to disable this)
- Live polls, which you can allow students to see results of immediately
- Can easily include mathematical formulae in answers using LaTeX equation editor, or type LaTeX code directly

Only in Angel (why we still need Angel):

- Gradebook
- Submitting and grading homework ("assessments" and "drop boxes")
- *Random* team generator for discussion / project groups

How to Use Piazza: a Guided Tour through our classes

- anyone can post a "question", "note" (no answer needed), or poll
- anyone can answer a "question", or add any followup comments
- anyone can endorse a question, answer, or note as good
- anyone can easily refer and link to other posts, e.g. "@61"
- instructors can "pin" important posts to the top, e.g. model posts
- · modification history shows how an answer has evolved; strangely addictive
- activity log necessary if requiring it for a grade, but also useful to check up on student credibility, or identify the best helpers and log that for future use (e.g. in case they ask for a letter of rec)
- tags & folders help keep things organized (some hygiene required)
- equation editor has visual menu of options; handles formatting

Tips from the Pros

- Allow students to post anonymously to each other, but not to instructor.
- Post model good questions and responses early in the semester.
- Encourage students to post responses that lead to thinking through concepts, and explain *why* this is more valuable than just unexplained answers.
- When students email you questions, especially early in the semester, politely redirect them to piazza with an explanation of why it will be valuable.
- Don't dominate the discussion as instructor.
- Endorse questions and answers as "good", especially early in the semester.
- Identify top piazza users early in semester and contact them personally to thank them.
- Requiring one contribution (post, answer, or poll vote) in the first 2 weeks will really jump start a class. (Idea: post a few easy seed questions about course logistics, and a couple of fun polls to give easy things for students to contribute to, and to prevent "junk" questions.)
- Earnestly remind students to *edit* each others' answers rather than just adding on differing (or even similar) ones. Otherwise students can be reluctant to delete what others write and will default to concatenation, which defeats piazza's best features: the wiki nature to create a single high-quality "class answer", and the efficiency of having to read only one answer.
- Customize email settings to your preferences.
- Ruthlessly mark questions as duplicate it keeps posts organized.
- Discourage use of "followup questions"; instead, ask new questions.