CSE599: Teaching Methods in Computer Science

CSE 1202

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Expect Today...

- Formative vs. summative assessments
- Rubrics
- Grading activity
- Practicum: create a rubric
4. Describe at least 3 ways to “find out what students don’t know” (e.g., for guiding discussion section or lecture planning).

10. Provide examples of formative and summative assessments in a specific computing course and their value for students and instructors

11. Create a rubric to support the efficient and replicable grading of a homework assignment in a specific computing course
Assessment

• Formative
  - Part of the learning process.
  - "Practice with feedback"
  - Low-stakes

• Summative
  - Evaluate student learning
  - e.g. final exam
  - High-stakes
Formative assessment

• Why do it?
  - Student involvement in identifying strengths / weaknesses (metacognition ... more on this later)
  - Help instructor identify common misconceptions

• How to do it?
  - Should be frequent, enabling students to continually improve
  - Feedback should be immediate to be most valuable
Formative assessment

• Examples from class you're currently TAing

• Additional strategies?
Summative assessment aka grading

- Goals?
Speed?

- Select only two or three possible "base" grades
  - Perfect
  - OK
  - Bad

- Use short but meaningful standard comments.
  - Keep track of what they mean; share with instructor.

- Pace yourself and focus
  - Focussed short stints
  - Allow plenty of lead time
Minimize the number of regrade requests

• Factors contributing to regrade requests
  - Accuracy of grading
  - Clarity of grading
    • did grader see all parts of response?
  - Fairness of the rubric
  - Regrading precedents
Grading accuracy

- Double check, particularly on exams
- Revisit the solutions
- Recalibrate
- Make note of common / special cases
Fairness

• Use a rubric
  - Clearly define point allocations
  - Keep for when regrade requests occur

• Review ~15 answers before creating rubric, then create rubric, then grade.

• Try to have a single person grade all of the same question.
  - Not always feasible, which makes rubrics all the more critical
Precedents

• Are regrades allowed?
• Is there a time limit for regrade requests; is it followed?
• How often are student regrade requests given more points?
• Is it clear who students should approach for regrade requests?
Pre-class grading activity

- Distribution of scores \textit{without a rubric}
Pre-class grading activity

- Distribution of scores with a rubric
Rubrics

• Positive scoring
  - Like in assignment
• Negative scoring
• Combination

Comments?
1. Reflect on grading with / without rubric.
2. Did you agree with the rubric?
3. Develop a (new) grading rubric for this exam question as a group.

[[ If you have time: what if the question was a proof OR algorithm design OR circuit design question? How would thes structure of the rubric change, if at all?

Don't forget to record your group reflection at the end of the practicum session.
Homework for Next Time

• Weekly: Check class website for assignment

• Assignments
  - Practicum assignment: if you didn’t present last week.