## Effective Grading and Giving Feedback

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### **Outline:**

- Grading and student learning
- Facts about grading
- Multiple roles of grading
- Analytic and holistic Grading
- Giving feedback
- Effective feedback
- Types of descriptive feedback
- Adequacy of the feedback



Do you enjoy marking?

# **Grading and student learning**

#### Establish learning goals:

Example: by the end of the course, students will be able to ...

#### Use concrete verbs for defining goals:

Define, argue, solve, create, etc

#### Do not use vague verbs for defining goals:

know, understand, etc

Students should be able to think like engineers. ????

## Facts about grading

- Grading should be managed from the first moment that an instructor begins planning a class.
- Trying to pretend that grades are not important is unrealistic.
- Grading is a complex context-dependent process.

## Multiple Roles of Grading

- Evaluation: grading process should produce a valid, fair and trust worthy judgment.
- Communication: grade is a communication to students, employers, graduate school.
- Motivation: grading affects how students study, what they focus on, how much time they spend.
- Organization: grade helps to mark transition, bring closure and focus effort for students and teachers.
- Faculty and student reflection: grading process give information about what students are learning.

## **Grading encompasses:**

- Establishing criteria and standards.
- Helping students gain the skill and knowledge they need.
- Assessing student learning over time.
- Offering feedback so students can develop as thinkers and writers.
- Using results to plan improvements in the classroom.

# **Analytic and Holistic Grading**

Analytic grading identify and assess components of a work.

Holistic grading assess student work as a whole.

## Holistic Grading

- Does not follow the usual formula for deducting points for various errors.
- It defines standards for various grades against which the entire document or presentation is judged.
- An effective written document or oral presentation must be evaluated in the context of the purpose for which it is intended, and the degree of success with which it satisfies this purpose.
- It may blend together many of the traits assessed separately in analytic scoring, making it relatively easier and reliable, it is not as informative for the learning situation as analytic scoring

## **Analytic Grading**

- Grade description: what forms grade A, B and ...
- Check sheet: List of what the student should check for and what the teacher will look for.

Checklist brings the criteria and standards strongly into mind and reinforces the importance of students self assessing their work.

 Rubric: a format in which each property of the student's work (organization, use of tables, equation, etc) is described using a scale from high to low. The traits of students work are separately named.

## **Consistent and Fair Grading**

- Rubric is important in both assessment and grading.
- Rubric is good for complicated problems that needs to be breakdown to smaller components.
- Better rubrics result in reliable assessments.
- Rubric helps TAs in grading process.
- In defining rubrics five point scale is better than 3 point.
- TAs should always ask course instructor before using rubrics.



## Giving Feedback

- Feedback is necessary for stable learning processes and well ordered knowledge and skills gain.
- Negative feedback is more prominent than positive feedback, with both having valid roles.
- Consider balancing the level of feedback to the scale of the task and the time available both to the tutor and the student to respond.
- Descriptive feedback is focused on improvement and around the learning goal.

clear



### Effective feedback

meaningful

compatible with students' prior knowledge

### **Effective Feedback**

For feedback to be effective for students, they need the following:

- an understanding of the desired goal
- evidence about their present position in relation to that goal.
- guidance on the way to close the gap between the two.

# Types of descriptive feedback prompt

Clarke (2003)

#### Reminder prompts:

Remember the rule about circles we talked about?

#### Scaffold prompts:

What about the rule which says that the area of a circle is  $\prod r^2$ ?

#### Example prompts:

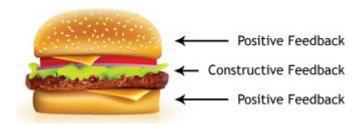
Calculate using  $\prod r^2$ . Multiply 27 x 27 then ...

### Adequacy of the feedback:

### Clarke(2001) suggests that:

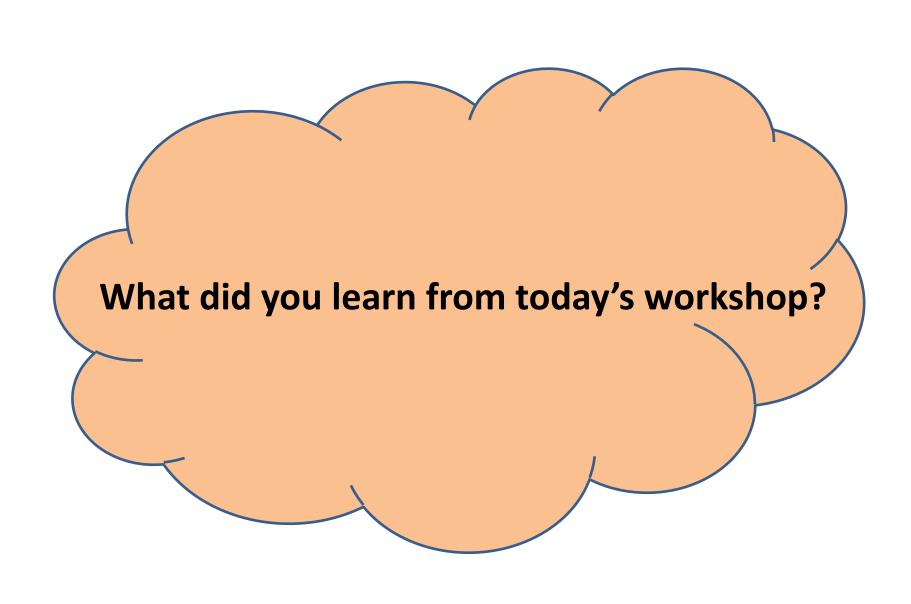
When giving written feedback, highlight two or three successes in the student's work and one area where some improvement is necessary.

#### Use feedback sandwich:



### Check the adequacy of the feedback:

- "Do you know what to do next?"
- "Is that enough help?"
- "What will you do if you get stuck again?"



### References

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### Thanks ...

Any questions?