This Photo by Unknown Author is licensed under CC BY-NC-ND

Using Feedback to Improve Student Learning

Agenda

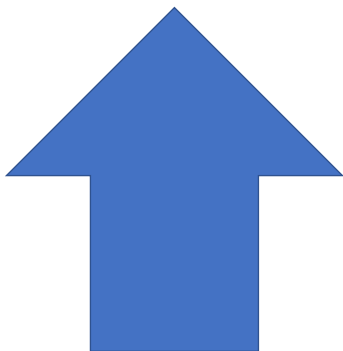Importance of Feedback

Current Practices

In Person and Online Strategies

Importance of Feedback
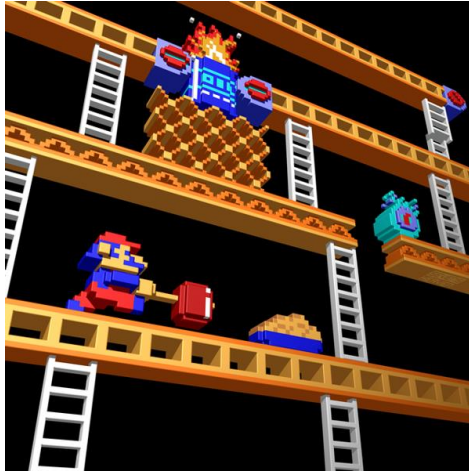
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Why Feedback Matters

- Effort

- Achievement

Hattie & Yates (2014)

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Video Game Example

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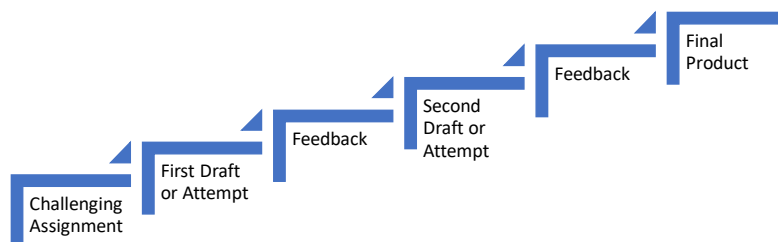© wavebreakmedia/shutterstock.com

The Academic
Self-Regulation Process

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Self-Regulation Process

Set a goal

Monitor progress toward goal

Make changes as needed so that the goal can be achieved

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Re-thinking Assignments: An Equity Issue (Taras, 2006)

Final Product

Feedback

Second Draft or Attempt

Feedback
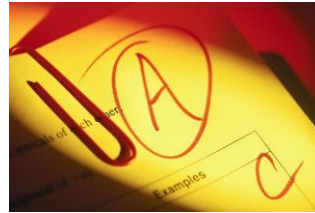
First Draft or Attempt

Challenging Assignment

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Characteristics of Effective Feedback

- Connected to a standard" (i.e. rubric)

- Informs the student

- Specific and constructive

- Prompt and frequent

(Wlodkowski, 2008):

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Feedback Principles

Nichol and Macfarlane-Dick (2006)

Clarifies goal
Facilitates self-assessment
Delivers high quality information
Encourages dialogue
Motivates
Improves performance
Guides teaching

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Current Practices

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What is the most common type of feedback provided on papers?

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What Feedback Do Students Get?
Stern and Solomon (2006)

Method:

- 30 student portfolios (all their work during college) were randomly selected
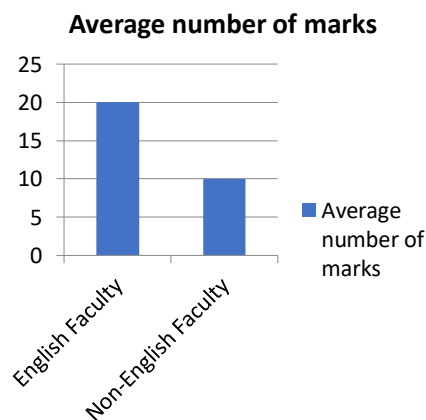
- A total of 598 papers were reviewed

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Feedback: Faculty Comments
Stern and Solomon (2006)

Only **8%** used a rubric!
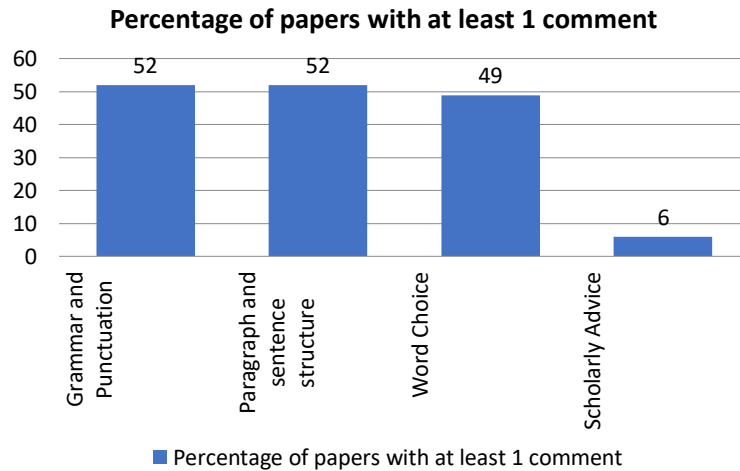
Average number of marks

No major differences between type of comments, except that English faculty made more technical comments

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Feedback: Faculty Comments

Stern and Solomon (2006)

Percentage of papers with at least 1 comment

Category	Percentage
Grammar and Punctuation	52
Paragraph and sentence structure	52
Word Choice	49
Scholarly Advice	6

■ Percentage of papers with at least 1 comment

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Feedback: Faculty Comments

Stern and Solomon (2006)

Is this what we want to emphasize?

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Faculty Feedback
Stern & Solomon 2006

What We Say is Important…
- Big Picture
- Organization
- Content

What We Give Feedback On…
- Technical corrections
  - Spelling
  - Grammar
  - Word Choice

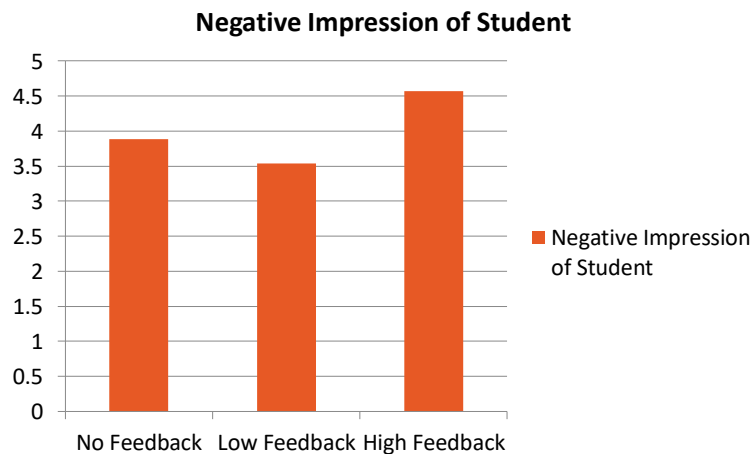www.drchristineharrington.org   17

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Feedback: Too Much?
Ackerman & Gross (2010)

Negative Impression of Student

Bar chart with x-axis categories: No Feedback (~3.9), Low Feedback (~3.55), High Feedback (~4.6). Legend: Negative Impression of Student.

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Poll Question

- What percentage of students understood the reason for the comments given by their professor?
  - 10%
  - 55%
  - 65%
  - 90%

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Student Comprehension of Comments

All our words from loose using have
lost their edge.
—Ernest Hemingway
(1899–1961)
from Death in the Afternoon

Only 55% of the students understood the reason for the comment.

Taylor 2011

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Zoom in on What is MOST Important

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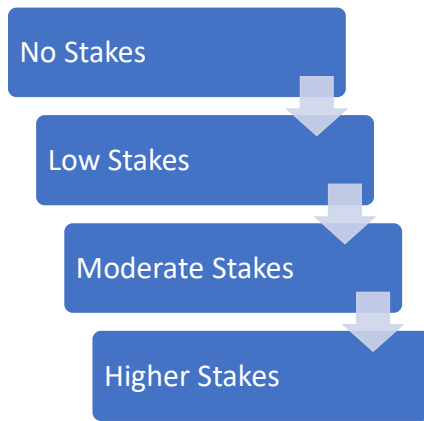# In Person and Online Strategies

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Let's Re-Think Feedback:
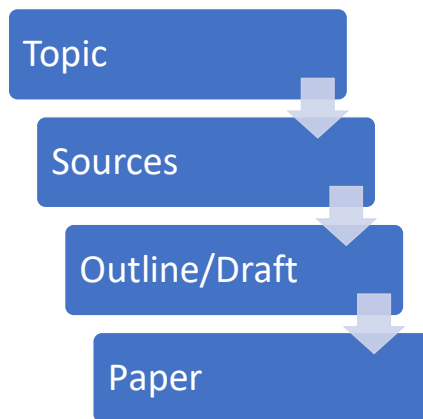## Building Feedback into Course Design

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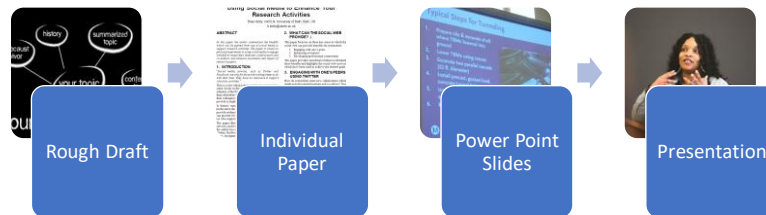# Scaffolding Assignments

Low-High Stakes to Build Self-Efficacy

No Stakes

Low Stakes

Moderate Stakes

Higher Stakes

Breaking Down Assignments to Benefit from Feedback

Topic

Sources

Outline/Draft

Paper

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Feedback:
Linking Assignments?

| Rough Draft | → | Individual Paper | → | Power Point Slides | → | Presentation |

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Resources that can Help

Models- Sample Papers or Presentations

Rubrics for Assignments

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Self-Assessment via Rubric

Analytical Rubric

Paper	"D" or "F" Work	"B" or "C" Work	"A" Work
Content	Inaccurate or minimal information included; Lack of organization or flow; Did not include original research studies	General overview of the topic; Accurate but missing important information. Difficult to differentiate between main points and details; Some details about at least 3 original studies	Comprehensive overview of the topic; Information was accurate and complete; Major points were emphasized; Good details about at least 3 original research studies; Well organized
Writing Skills	Did not address three main themes. Limited to no research support for statements. Citations not used or inappropriately used. Several spelling and grammatical errors.	Good organization- included organization, described 3 main themes, conclusion summarized key points. Most statements supported by research. APA style was used. Few spelling and grammatical errors.	Well organized- clear introduction, description of approximately 3 main themes, and strong conclusion. Research supported all statements and APA Style was used. Free of grammatical and spelling errors
Resources	Did not include at least 7 scholarly sources; Sources were not research based or related	At least 7 scholarly sources were used- some were not research based or not directly related to the topic	At least 7 scholarly sources were used; All sources directly related to topic. At least 3 original studies included

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Break Out Room Discussion

- What opportunities do you give your students for feedback?

- How might you increase opportunities for feedback?

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Monitoring Progress: Types of Feedback

Cognitive Feedback	• During homework or studying process
Outcome Feedback	• After students receive their grade

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Cognitive Feedback: In Person Approaches

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Cognitive Feedback: In Person Approaches

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Cognitive Feedback: In Person Approaches

Power of VERBAL Feedback
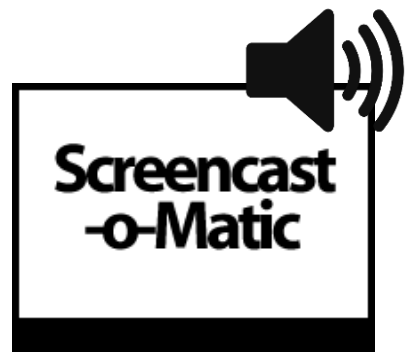
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Cognitive Feedback: Online Courses

- Weekly quizzing

- Testing until you get it correct

Landrum (2007); Di Hoff, Brosvic, & Epstein (2003); Epstein, Epstein, & Brosvic (2001)

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Cognitive Feedback: Online Courses

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Outcome Feedback:
In Person and Online Courses

A Post-Exam Reflection Exercise

Part I: Predicting Your Performance

First identify the main topics assessed on the exam in the content column. Then list the strategies you used to study the material and the amount of time you devoted to studying each topic. In the prediction column, predict your overall grade on the exam and how well you answered questions related to the topics. Here, you can indicate percent correct or a scale of 1–10 depending on the exam type. Percent correct predictions can work well with multiple choice questions while rating scales will probably work better for short answer or essay questions. Complete these steps before you get your grade.

Part II: Your Actual Performance and Accuracy

When you receive your grade, write down your actual overall grade and capture your performance on the topics you listed. Completing the topic information will require you to review your performance on individual exam items, looking for questions related to each topic. This is an important part of the process because it will allow you to see which topics you mastered and which ones may require more work to learn. The way in which you enter this information may vary depending on the nature of your exam. For example, you may indicate that you got 5/8 multiple choice questions correct or that you earned 18/20 points on an essay question related to that topic. After you enter the actual grade, indicate whether your prediction was accurate or if you over or under-estimated your performance.

Part III: Action Plan

This last part is perhaps the most important step. Here, you are identifying action steps you can take to improve your overall performance or the performance on certain topics. Consider your studying behaviors. Did you spend more time on one topic versus another? Did you use different study techniques? What strategies can you use the next time you are studying? You can also look for error patterns. Did you perform better on multiple choice or essay items? Were there any test-taking behaviors that impacted your performance? Put these study and test- taking strategies into action and then assess whether or not they worked after your next exam.

Content	Studying Behaviors	Prediction	Actual	Accuracy?	Action Plan
Overall Test Grade					
Topic 1					
Topic 2					
Topic 3					

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Break Out Room Discussion

• What opportunities do you give your students for feedback?

• How might you increase opportunities for feedback?

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Feedback can be time-consuming

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Targeted Feedback

Feedback on
one aspect
of the
assignment

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Why Peer Feedback?

- Limited Instructor Time for Feedback
- Opportunity to Learn from Peers
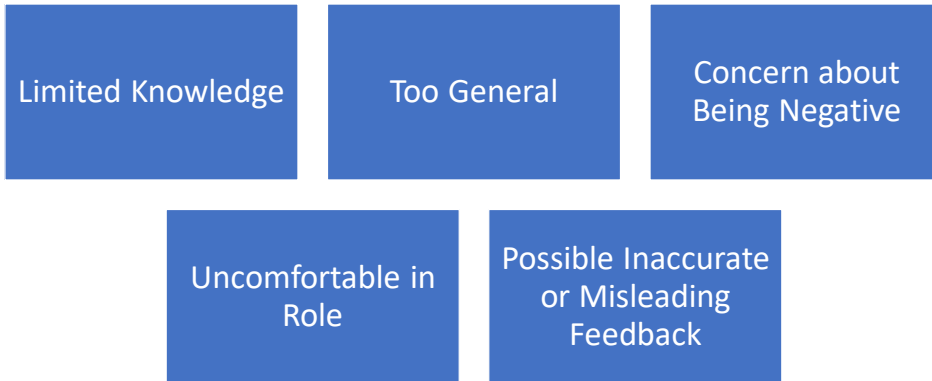- Exposure to Models

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What are the challenges of peer feedback?

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Challenges of Peer Feedback

Limited Knowledge	Too General	Concern about Being Negative
Uncomfortable in Role	Possible Inaccurate or Misleading Feedback	

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Conveyer Belt Model (Facey, 2011)

- Divide Students into Several Groups
- Train Students on Specific Type of Feedback
- Use Class Time to Provide Feedback

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Conveyer Belt Model (Facey, 2011):
An Example

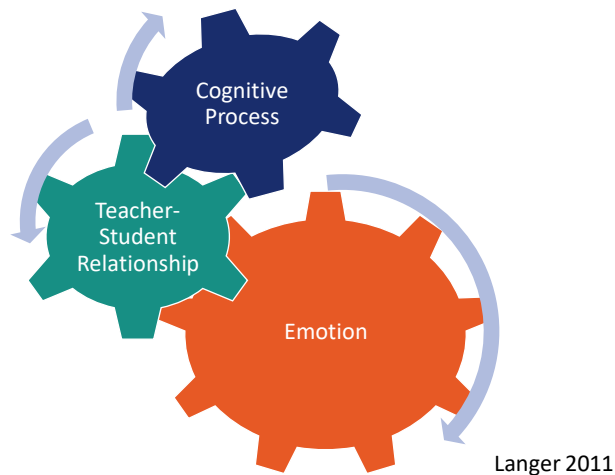| Citation Police	Main Idea Locator	Completeness Checker
• Look for in text citations	• Underline most important point or thesis statement	• Answered all questions

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Peer Feedback

Rubrics

Form/Brief Paper

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Faculty Role in Peer Evaluation

- Train Peers

- Conduct Quality Check
  - Consider Grading Feedback

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Feedback is Complex

Cognitive Process

Teacher-Student Relationship

Emotion

Langer 2011
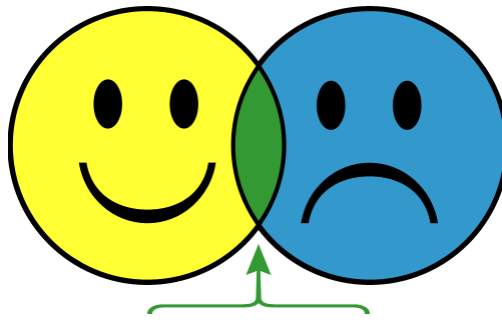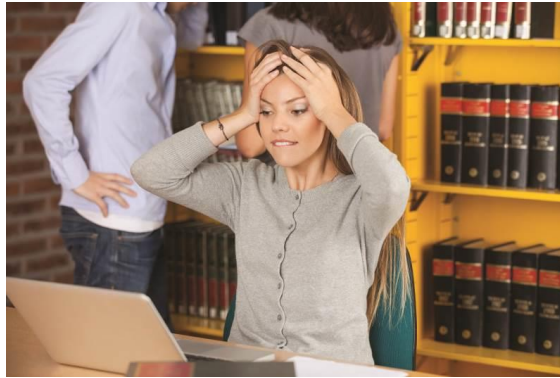
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Emotions and Feedback

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Break Out Room Discussion

- Describe a time where you had an emotional reaction (positive or negative) to feedback.

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The Role of Attribution Theory

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Mueller and Dweck's (1998) Study

| Moderate Difficulty Puzzle | ➤ | Feedback (Based on Group) | ➤ | Difficult Puzzle | ➤ | Moderate Difficulty Puzzle |

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Poll Prediction Time:
Who Performed **the BEST?**
Who Performed **the WORST** on the last puzzle?

Experimental Group 1	Experimental Group 2	Control Group
Ability: Wow you did really well, you must be SMART.	**Effort:** Wow you did really well, you must have WORKED HARD.	**Control:** Wow you did really well.

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The Results…

Line graph with x-axis labeled "Puzzle 1" and "Puzzle 3", y-axis from 3 to 6.5. Legend: Ability (blue), Effort (red), Control (green). At Puzzle 1 all three start at ~4.5; at Puzzle 3 Effort rises to 6, Control rises to ~4.7, Ability declines to ~4.2.

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Students in Ability Praise group

- Solved less puzzles correctly

- Did not want to persist on tasks

- Did not enjoy the task as much

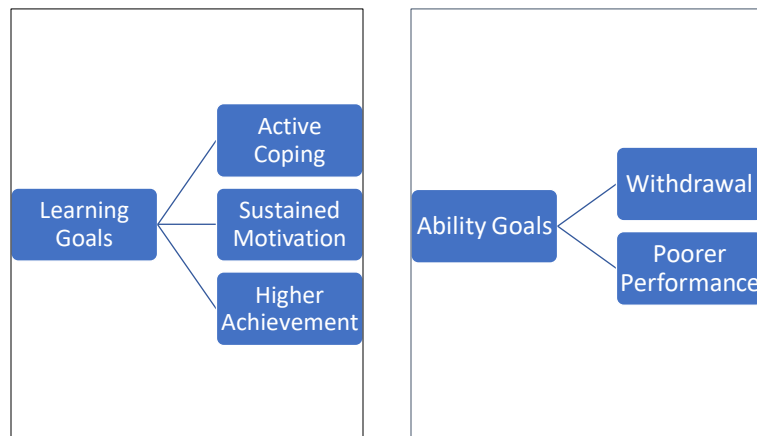as students in the effort praise group.

True in College Too?
Grant and Dweck (2003)

Learning Goals → Active Coping, Sustained Motivation, Higher Achievement

Ability Goals → Withdrawal, Poorer Performance

Our Role…

Help students attribute their mistakes to something that is INTERNAL and CHANGEABLE (like effort)!

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Chat:
What Will You Take-Away from this Presentation?

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Thank you!

Questions? Contact me at drchristineharrington@gmail.com

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