




Room to Grow

Enhancing Learning by Supporting Autonomy

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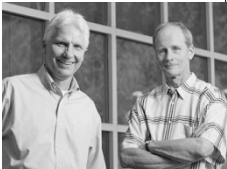
Best Practices Conference, 2013, Atlanta, GA

The Plan

- A bit of **Self-Determination Theory** (SDT)
- **Reeve's advice:** how to enhance learning by supporting autonomy
 - Five Practices
 - A few case studies (about 3.5)
- **Think it through:** where, how, and why might you provide more autonomy?

Self-Determination Theory

- **Preferences**
- Need for *autonomy*
- **Intrinsic motivation**



Rich Ryan & Ed Deci

Autonomy Support

Why?

- **Better student outcomes:** learning, subsequent motivation, engagement, performance, and well-being
- **Benefits for teachers:** more accomplishment, less emotional exhaustion; greater relationship satisfaction.
- **Learn-able:** novice & experienced teachers respond to training

See Reeve, 2011, for details.

Autonomy Support How?

1. Recognize your students' experiences.
2. Bring that into the learning process.
3. Develop student's capacity for autonomous self-regulation.

And now, five mechanisms.

1. Nurture inner motivational resources.

Use when introducing a new learning activity, to spur engagement.

Autonomy-Supportive	Controlling
<i>Inner motivational resources:</i>	<i>External motivational resources:</i>
• Need for autonomy	• Directives, commands
• Intrinsic motivation	• Compliance requests
• Self-endorsed goals & values	• Assignments
• Optimal-challenge preference	• Incentives
• Curiosity	• Rewards

Students as origins, agents, doing what they value.

Adapted from Reeve, 2011

Case Study Stacie & the *MRI Project*

- Health Psychology students work with MRI students to address the issue of MRI-related anxiety
- Consultation model
- Interprofessional education (IPE) opportunity
- Development of Institute of Medicine (IOM) Core Competencies
- Development of professional identity

1. *The MRI Project*

Used to spur engagement.

Autonomy-Supportive	Controlling
<i>Inner motivational resources:</i>	<i>External motivational resources:</i>
• Provide personal experience	• Describe typical experience
• Student-selected evidence	• Professor-assigned readings
• Identification of issues to address	• Assigned issues to address
• Student-determined solutions	• Professor-determined solutions

Students as origins, agents, doing what they value.

2. Provide explanatory rationales.

Use when the task is uninteresting (but important).

Autonomy-Supportive	Controlling
<i>Communicate and reveal the task's...</i>	<i>Offer no rationale, and students come to think that...</i>
<ul style="list-style-type: none"> • importance • potential usefulness & significance • value, especially when not obvious 	<ul style="list-style-type: none"> • it's busy work • rules are arbitrary • they are being ordered around

Students internalize value (from not worth to worth doing).

Adapted from Reeve, 2011

Case Study Stacie & RM Consulting

- Real-world questions
- Students collaborate to
 - Review the literature
 - Design a study
 - Prepare a recommendation
- Increased engagement

2. RM Consulting.

Use when the task is uninteresting (but important).

Autonomy-Supportive	Controlling
<i>Communicate and reveal the task's...</i>	<i>Offer no rationale, and students come to think that...</i>
<ul style="list-style-type: none"> • similarity to real-world decision making • relevance to other courses • contribution to developing skills expected by employers 	<ul style="list-style-type: none"> • they won't have to do these things after college • this is just what <i>this</i> professor wants • silly professor, research methods is just a required course

Students internalize value (from not worth to worth doing).

3. Employ non-controlling, informational language.

Use when communicating requirements & responsibilities; when giving feedback; or addressing unproductive behavior.

Autonomy-Supportive	Controlling
<i>Communicate requirements & address problems with messages that are...</i>	
<ul style="list-style-type: none"> • nonevaluative • flexible • informational 	<ul style="list-style-type: none"> • evaluative • rigid • high-pressure

- Maintains positive student-teacher relationships
- Helps students self-diagnose (and take responsibility for) performance.

Adapted from Reeve, 2011

Case Study Keith and a MOOC

- Learning environments
 - Coursera: video lectures, assignments, quizzes
 - Dr. Anderson Smith, Alex Duncan
 - OLI: text, videos, activities
 - Carnegie Mellon University
- Of 27,000 enrolled students...
 - 63% were "active"
 - 56% watched first lecture
 - 41% accessed OLI
 - 7% watched final lecture
 - 4% took the final exam

Week 4: Learning

We acquire new knowledge through our experiences. We will discuss the different ways we can learn and acquire new knowledge.

Please complete the following for Week 4:

Requirements	Open Date	Close Date	Approximate Time for Completion	Materials
Lecture Video 4.1: Learning and Classical Conditioning	Monday, April 15, 8:00 am EDT		13 minutes	
Lecture Video 4.2: Operant Conditioning	Monday, April 15, 8:00 am EDT		12 minutes	
Lecture Video 4.3: Other Types of Learning	Monday, April 15, 8:00 am EDT		9 minutes	
Review OLI Modules 13-15				
Quiz 4	Friday, April 19, 8:00 am EDT	Friday, May 3, 8:00 am EDT	20 minutes	

End of Week 4 Survey (optional)

- In order to better understand how MOOCs help students learn, researchers would like to invite you to participate in a research experiment. This research experiment is optional and your decision to participate or not will not impact your grade in this course. For more information about the research experiment and your rights as a participant, please click here. Read the consent form carefully. If you are interested in participating, then simply fill out this End of Week 4 Survey. NOTE: This survey is optional and will not affect your grade.

Week 4 Objectives:

- Describe the processes of learning in classical conditioning.
- Explain the conditions leading to extinction and spontaneous recovery.
- Explain the processes of generalization and discrimination.

[Admin Help](#)

The Persistence and Extinction of Conditioning

Although at the end of the first extinction period the CS was no longer producing salivation, the effects of conditioning had not entirely disappeared. Pavlov found that, after a pause, sounding the tone again elicited salivation, although to a lesser extent than before extinction took place. The increase in responding to the CS following a pause after extinction is known as **spontaneous recovery**. When Pavlov again presented the CS alone, the behavior again showed extinction.

Learn by doing

For each example, select the term that best describes it.

Example 1: A dog has learned to associate a whistle with food. Now the food no longer appears and the dog salivates less and less until it does not salivate at all.

☐ Extinction ☒ Spontaneous recovery

Example 2: Dave has been working with a therapist to give up smoking. He has learned to stop having cravings when he sees someone about to light up a cigarette and knows he is free. Then he goes to a party, sees a guy about to light up, and experiences strong cravings. What is going on?

☐ Extinction ☒ Spontaneous recovery

Example 3: When a previously learned behavior disappears because the conditioned stimulus is no longer paired with the unconditioned stimulus, we call it _____.

☐ classical conditioning ☐ extinction ☐ spontaneous recovery

A conditioned response has disappeared, but it reappears the next day when the conditioned stimulus is presented. This is called _____.

Case Study Keith and a MOOC

- OLI
 - Optional yet 41% of students accessed it
 - "The OLI textbook is a great tool. I've already done some courses on Coursera, but this is the first time I encounter[ed] such a textbook. I really appreciate that and would like to see it for more courses!"
- Written assignments
 - Rubric was brief and general
 - Some students were frustrated
- Quizzes
 - Allowed one week to complete, then two weeks
 - Some students wanted *more* time

4. Be patient. Make learning the constant, time the variable.

Use when learning complex concepts or skills that require trial-and-error, reflection, and revision.

Autonomy-Supportive	Controlling
Displaying patience as students...	Impatiently interrupt and...
• explore & manipulate materials	• offer a (your) solution
• make plans & set goals	• do it for them
• revise work & work strategies	• invade their space

- Learning takes time (more than most predict).

Adapted from Reeve, 2011

Case Study Larry & U-Pace



- Mastery-based, self-paced.
- Higher grades, and more learning, especially for disadvantaged students.
- Students who are ADA (Americans with Disabilities Act) eligible
 - Attempting to coach learning skills and content mastery under deadlines.
 - Anxiety, depression, other episodic conditions

5. Acknowledge & accept resistance & negative emotion.

Use when learning complex concepts or skills, AND when student preferences don't match teacher requests & requirements.

Autonomy-Supportive	Controlling
Respond to resistance & negative emotion with...	Counter/control resistance & negative emotion...
• acceptance	• dismissively
• acknowledgement	• with counter-arguments
• gratitude	• to (immediately) change behavior
...because they are potentially valid.	...so that it's acceptable to you.

- Students often have a point. **Focus on coaching impression management.**

Adapted from Reeve, 2011

Small Case Study

Impression Management
Dr. Rudiger's Finishing School.



