#### **Student Motivation for Learning**



## Motivation – O.E.D.

- a) orig. *Psychol.* The (conscious or unconscious) stimulus for action towards a desired goal, esp. as resulting from psychological or social factors; the factors giving purpose or direction to human or animal behaviour. Now also more generally (as a count noun): the reason a person has for acting in a particular way, a motive.
- b) orig. *Psychol.* and *Sociol.* The general desire or willingness of someone to do something; drive, enthusiasm.

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#### Motivation

Motivation is "the process whereby goal-directed activity is instigated and sustained" (Schunk, Pintrich, & Meece, 2008, p.4)

Motivation has a reciprocal relationship with learning: "motivation influences learning and performance and what students do and learn influences their motivation" (ibid, p.5)

"In the context of learning, motivation influences the direction, intensity, persistence, and quality of the learning behaviors in which students engage" (Ambrose, et al., 2010, p.69)



#### What questions do we have about fostering student motivation in our courses?



Identify 1 student behaviour that indicates they are motivated in your course(s). What activities or strategies do you use to foster this student behaviour in your course(s)?

Student behaviour:

Activities or strategies used:



Small group discussion: Share sample behaviours and activities or strategies used.

Small group reporting: Identify 1 student behaviour and 1 sample activity or strategy used to share.



Highlights from the small group work / Observations about student motivation

Record 1 new activity or strategy that you could try in your course to further foster student motivation.



### **Historical Review**

- Drive Theories: given inner "force" drives
   behaviour to regain balance
- Behavior-Based Theories: behaviour tied to consequences (reward/punishment)
- **Cognitive Theories**: internal perceptions affect behaviour

Svinicki, 2004 (psychology, education)



#### **Amalgamated Model**

 Based on three currently used motivation theories





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#### Key Questions for Students

- Can I do this task? (expectancy)
- Do I want to do this task and why? (value)



### **Expectancy Determined By:**

Element	Description	Instructional Strategies
Self-efficacy	Capability to succeed	
Difficulty	Appropriate level of challenge	
Prior experience	Build on past success and connect past work	
Encouragement	Positive talk and modeling	
Beliefs related to learning	General self-confidence as learners, nature of ability, origins of success/failure	

### Task Value Determined By:

Element	Description	Instructional Strategies
Intrinsic value	Interesting material and tasks	
Utility value	Short and long term use	
Need satisfaction	Need to succeed/avoid failure	
Choice and control	Independent decisions	
Influence/ opinions of others	Do what others value	



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Application: What 1 idea for a new activity or strategy will you apply to your teaching?



What do you have to change for you to implement this idea?

#### How will you facilitate that change?



#### **Contact Information**

- Donna Ellis, EV1 320, ext. 35713
- donnae@uwaterloo.ca
- Gordon Stubley, CPH 3677, ext. 32875
- <u>stubley@uwaterloo.ca</u>



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- Schunk, D.H., Pintrich, P.R., & Meece, J.L. (2008). Motivation in education: Theory, research, and applications.
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# Follow-up

 Engineering Teaching Development Sharepoint Site:

https://sharepoint.uwaterloo.ca/sites/Engineering-Teaching

- Summary of Session including Photos of Whiteboard
- Exemplary Activities Demonstrated in Workshop
- Handout (augmented with completed Expectancy and Value strategies tables)



#### Expectancy Determined By:

Element	Description	Instructional Strategies
Self-efficacy	<ul> <li>Capability to succeed</li> <li>Faculty need to help students accurately assess their potential for success and learn skills to be successful</li> </ul>	<ul> <li>Clearly identify pre-reqs</li> <li>Provide guidance for remediating needed skill/knowledge</li> <li>Use diagnostic tests so students see what they don't know</li> <li>Provide clear course expectations (LOs, rubrics) so students can see where they may need help</li> <li>Articulate and have them practice effective study strategies</li> <li>Have students articulate what they need to work on and do differently</li> </ul>
Difficulty	Appropriate level of challenge	<ul> <li>Use diagnostic tests so you know what students can do</li> <li>Review syllabi (pre-reqs and past versions of same course)</li> <li>Talk to your colleagues</li> <li>Set assignments that are challenging but not impossible</li> <li>Get student feedback during term</li> </ul>
Prior experience	Build on past success and connect past work	<ul> <li>Review pre-req syllabi so know skills taught</li> <li>Provide early success opportunities (short, low % assess'ts)</li> <li>Scaffold ass'ts to build skills</li> <li>Analyze task requirements and connect to past tasks (you do, or can do with students)</li> </ul>
Encouragement	Positive talk and modeling	<ul> <li>Tell students you believe they can succeed</li> <li>Showcase past student work</li> <li>Be approachable about providing help as needed</li> <li>Give hints to guide</li> <li>Give timely, targeted feedback &amp; mark consistently</li> <li>Model effective learning strategies</li> </ul>
Beliefs related to learning	General self-confidence as learners, nature of ability, origins of success/failure	<ul> <li>Tap into general learning confidence to help contextualize a poor result</li> <li>Nature of ability – model a malleable mindset, focus on effort</li> <li>Attribution theory – help students learn to attribute success to studying, time management, and hard work and have them make choices to avoid blaming others for poor results</li> </ul>

	Element	Description	Instructional Strategies
	Intrinsic value	<ul> <li>Interesting material and tasks</li> <li>Faculty need to get students intrigued</li> </ul>	<ul> <li>Connect the material to students' interests (or have them do this)</li> <li>Use real-world examples &amp; focus on application, including in assessments</li> <li>Provide authentic tasks to engage interest</li> <li>Use novel examples</li> <li>Vary teaching methods and materials</li> <li>Pose questions &amp; identify paradoxes in discipline</li> <li>Show your interest in/passion for your subject</li> </ul>
	Utility value	Short and long term use (at school, in life, in future career)	<ul> <li>Teach content and skills JIT before use</li> <li>Provide authentic tasks to demonstrate relevance</li> <li>Explain role of course within larger curriculum</li> <li>Identify transferable skills students are learning and explain how used in careers</li> <li>Have students reflect on what learned in course/ass't and future utility</li> </ul>
	Need satisfaction	<ul> <li>Need to succeed/avoid failure</li> <li>Try to influence how students define "success" = learning with all its mess – focus on mastery (learning) vs performance goal (perform better than others) orientation</li> </ul>	<ul> <li>Provide clear instructions and rubrics so expectations are clear</li> <li>Offer additional resources for those who want to master material</li> <li>Give option to resubmit work or submit draft for comment</li> <li>Have students compete against self – use self-reflection to do this</li> <li>Work out problems in class, mistakes &amp; all</li> <li>Ensure assessments promote learning</li> </ul>



Element	Description	Instructional Strategies
Choice and control	<ul> <li>Independent decisions</li> <li>Encourages students to work harder to reach outcomes, take more risks &amp; accept challenge</li> <li>More control = more vested in outcomes &amp; better ability to see consequences of behaviour</li> <li>Little freedom of choice can lead students to abdicate responsibility for their behaviours to the teacher</li> </ul>	<ul> <li>Trust your students</li> <li>Give students choice in products or process of learning (choose project topic, set schedule for deliverables, choose medium to convey end product)</li> <li>Engage students in setting boundaries for assigned work</li> <li>Respect students' opinions and questions</li> <li>Give rationales for instructional decisions so students learn what's under your control (e.g., marks for ass'ts, safety training)</li> <li>Offer hints vs telling students what to do</li> </ul>
Influence/ opinions of others	Do what others value	<ul> <li>Clearly articulate what you value through expectations and feedback</li> <li>Reward what you value (e.g., no/low consequence for risk-taking by grading process vs product)</li> <li>Model what you value (e.g., coming to class prepared, persisting with a problem, admitting what you don't know and finding an answer)</li> <li>Show your own enthusiasm for learning</li> <li>Help students connect with peers – may engage more if peers engage = being part of a community (fits with affiliative and approval needs too)</li> </ul>



### Enhanced Amalgamated Model

 Based on three currently used motivation theories

