

FOSTERING MOTIVATION IN SECONDARY CLASSROOMS

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INTRODUCTION

Students struggling to be motivated within the classroom is a constant battle for both teachers and students. Every teacher wants their students to be motivated and interested in their content. Through this research, I hope to explore the different ways that a person is motivated and how to create an environment that encourages that autonomous motivation that teachers so yearn for their students to have.

TPEP CRITERIA

Criterion 8: Exhibiting collaborative and collegial practices focused on improving instructional practice and student learning.

INQUIRY QUESTIONS

- What is the difference between intrinsic and extrinsic motivation?
- How is motivation different from engagement?
- How can motivation be measured?

Self-Determination Theory's Taxonomy of Motivation						
Motivation	AMOTIVATION	EXTRINSIC MOTIVATION				INTRINSIC MOTIVATION
Regulatory Style		External Regulation	Introjection	Identification	Integration	
Attributes	<ul style="list-style-type: none"> • Lack of perceived competence • Lack of value • Nonrelevance 	<ul style="list-style-type: none"> • External rewards or punishments • Compliance • Reactance 	<ul style="list-style-type: none"> • Ego involvement • Focus on approval from self and others 	<ul style="list-style-type: none"> • Personal importance • Conscious valuing of activity • Self-endorsement of goals 	<ul style="list-style-type: none"> • Congruence • Synthesis and consistency of identifications 	<ul style="list-style-type: none"> • Interest • Enjoyment • Inherent satisfaction
Perceived Point of Causality	Impersonal	External	Somewhat External	Somewhat Internal	Internal	Internal

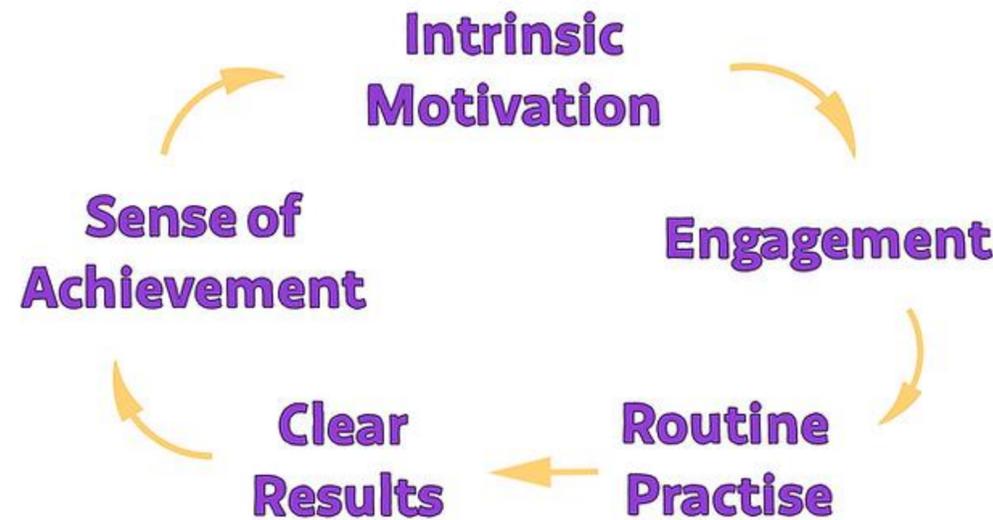
TOOLS

All the tools I can find could be useful in supporting my topic. The goal is to give students autonomy which is supported by giving students choice. That means with any assignment I give to the students there will be a variety of ways that the task can be accomplished. Even when students are given a set of tools to complete a task, if they can think of another way or have access to something in addition to what I've already provided for them to use, then they are more than welcome to use those things. There will definitely be some tools that students may find more useful than others, so in that regard I could help students in narrowing down what they think will help, but if a student thinks they will be able to complete a task in a certain way and it is indeed feasible, then I would like to leave them with that opportunity to choose to do that for themselves.

To start off my year, one tool I would be interested in using is the Science Motivation Questionnaire II so that I could get a little bit of a baseline of where my students are at with how motivated they are to learn physics and to see which students may need more support in feeling confident in their autonomy.

SELF-DETERMINATION THEORY (SDT)

The self-determination theory (SDT), a broad framework for understanding factors that inspire or damage intrinsic motivation and autonomous extrinsic motivation, appears throughout multiple papers included in this project. One research paper hypothesizes that applying SDT to education means more autonomous forms of motivation. This will lead to increased levels of engagement, learning, and wellness. Research shows that when students are more autonomously motivated, the greater the effort that is put forth, and when that motivation is consistently internalized, the more it becomes part of the learner's identity, leading to higher engagement and confidence in one's skills. SDT gets similar results even at higher academic levels such as law school where students who experienced autonomy-supportive instructors showed less decline in need satisfaction and well-being, as well as receiving higher grades, performing better on the bar exam, and reported higher autonomy in post-graduation. It has also been researched that in collectivist cultures, SDT still plays a major role in wellness of a person and improved coursework when they are in an autonomy-supportive environment. Other research that takes place in a variety of Asian countries where a more traditional, controlled classroom environment is prevalent finds that when students are given more autonomy, they are more likely to be intrinsically motivated to learn the content, showing that, at least between East Asian and North American samples, that autonomy is important to well-being, no matter one's cultural background.



CONCLUSIONS

Intrinsic motivation plays a major role in a learner's engagement, academic success, and overall well-being. The more internalized and autonomous the motivation is, the better. Autonomous supportive teaching methods include the freedom of choice and psychological need supports from both parents and teachers. This can shift students into a cycle of gaining confidence in their skills which in turn increases their motivation to continue learning. By continuing to put students through this cycle, they can extend this practice to beyond their time in the classroom.

With recent research being so diverse in how engagement is defined, it is difficult to pinpoint exactly what engagement means in education, although many in the field agree that motivation is a contributing factor towards higher engagement but is not the sole indicator.

One way motivation can be measured is through the Science Motivation Questionnaire II. It was developed to gauge the motivation of non-science students at a university to figure out who might need more attention and support in feeling better about science. Although no evidence has been found of the attempt, putting this into the form of another subject seems reasonably feasible.

ACTION

A teacher's goal for their classroom is to create an autonomy supportive environment. This will look like giving their students as much freedom of choice as possible. I think that without realizing this during my student teaching, one of the reasons my lower-level classes were more engaged when I gave them projects to complete, was because they were given a choice on how to complete it. For all of their projects, they were given certain requirements to meet, but how they got there and what their end product looked like did not matter towards their grade and based on my research, that is why they were so engaged in it.

Teachers should also start to practice focusing more on student interests and questions. So, if there is opportunity to go more in depth with a student's question than just a single sentence answer, then a teacher should do so. This may present a problem of slowing down the lesson, but as long as a teacher can tie things back to the curriculum, then they should not worry about how fast they get through their instruction. It's a little bit harder for AP classes because that has a more set timeline that teachers have to get through. By providing a deeper explanation of things when the opportunity presents itself, that will help in building the students' understanding and confidence in their knowledge of a topic.

The goal is to provide as much structure for learning as possible without being controlled. This will create an autonomy supportive environment that will theoretically lead to greater motivation to learn. I do foresee needing to implement certain levels of control, especially in the beginning of each year as teachers learn about the backgrounds and personalities of each of their students, as well as for their students with learning disabilities that need that more strict structure, but otherwise, teachers should intentionally leave as much questioning and answering for the students themselves in order to give them their autonomy.

Science Motivation Questionnaire II

In order to better understand what you think and how you feel about your college science courses, please respond to each of the following statements from the perspective of "When I am in a college science course..."

- [Response scale: Never Rarely Sometimes Usually Always]
01. The science I learn is relevant to my life
 02. I like to do better than other students on science tests
 03. Learning science is interesting
 04. Getting a good science grade is important to me
 05. I put enough effort into learning science
 06. I use strategies to learn science well
 07. Learning science will help me get a good job
 08. It is important that I get an "A" in science
 09. I am confident I will do well on science tests
 10. Knowing science will give me a career advantage
 11. I spend a lot of time learning science
 12. Learning science makes my life more meaningful
 13. Understanding science will benefit me in my career
 14. I am confident I will do well on science labs and projects
 15. I believe I can master science knowledge and skills
 16. I prepare well for science tests and labs
 17. I am curious about discoveries in science
 18. I believe I can earn a grade of "A" in science
 19. I enjoy learning science
 20. I think about the grade I will get in science
 21. I am sure I can understand science
 22. I study hard to learn science
 23. My career will involve science
 24. Scoring high on science tests and labs matters to me
 25. I will use science problem-solving skills in my career
- End. Thank you

REFERENCES

