

Cambridge Schools Conference, Orlando 23-24 June 2023 #camschoolsconf

Positive teachers, positive students, positive classrooms

Securing a positive learning environment in every classroom

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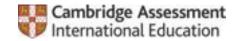
When a school provides a positive learning environment, what do you see?









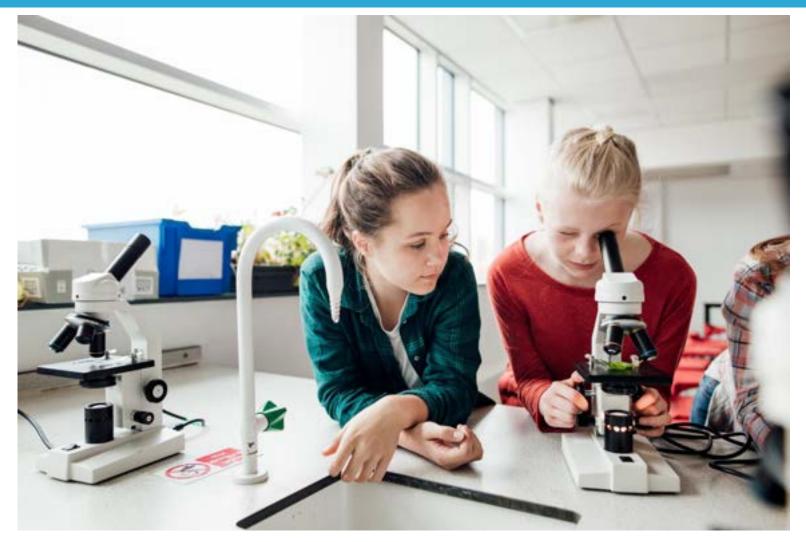








































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Engagement



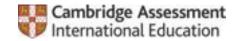
Behavioural engagement

"the active participation and involvement of the student in social groups, classroom interaction, study (both at school and home) and extracurricular activities related to school"

Pietarinen et al. (2014)







Why?









Cognitive engagement

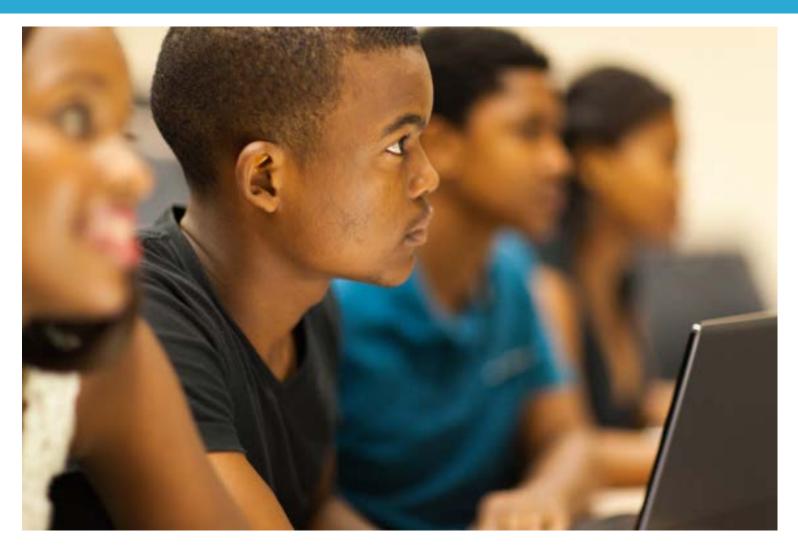
"the student's personal investment in learning activities, including [taking responsibility for their learning], the commitment to mastery learning and the use of studying strategies"

Pietarinen et al. (2014)











Signs of a positive learning environment...

Emotional engagement

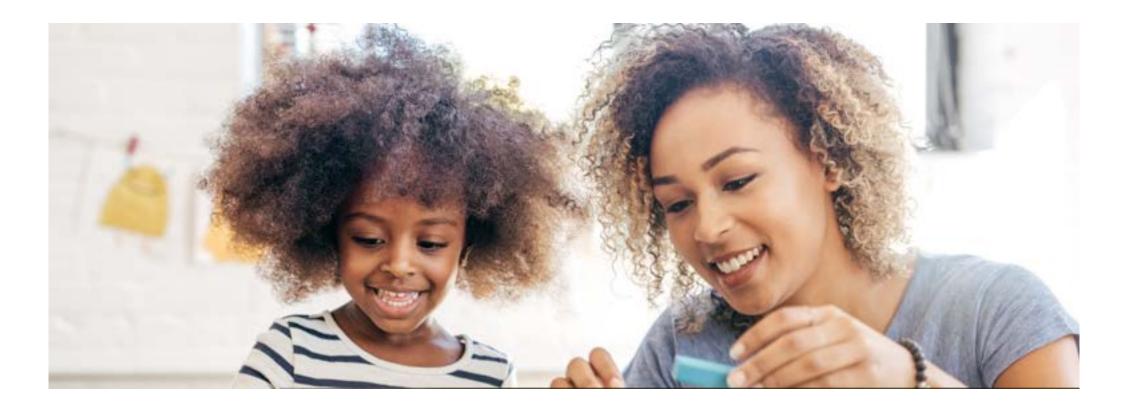
"including enjoyment, support, belonging and attitudes towards teachers, peers, learning and school in general"

Pietarinen et al. (2014)

















Can we apply these definitions to teachers?





Behavioural engagement

"the active participation and involvement of the teacher in social groups, classroom interaction, study (both at school and home) and extracurricular activities related to school"

Pietarinen et al. (2014)



Cognitive engagement

"the teacher's personal investment in learning and professional development activities, including [taking responsibility for their learning], the commitment to mastery learning and the use of studying strategies, reflection on their teaching"

Pietarinen et al. (2014)



Signs of a positive learning environment...

Emotional engagement

"including enjoyment, support, belonging and attitudes towards students, peers, learning and school in general"

Pietarinen et al. (2014)



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High engagement \rightarrow Positive schools

High motivation → High engagement



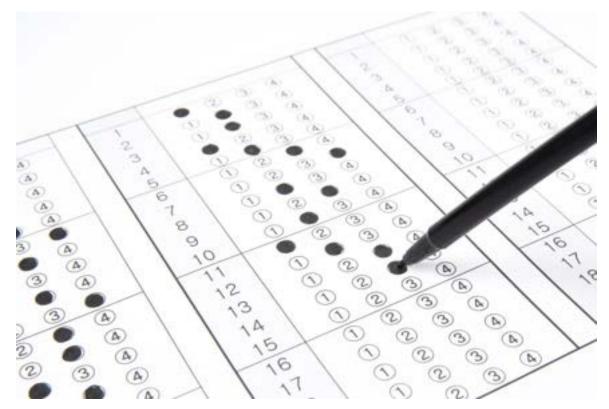
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Motivation

What can we learn about positive classrooms, by using motivational theories to help us to think?



In your school, is students' worth, or value measured solely or mainly by grades?





In your school, is students' worth, or value measured solely or mainly by grades?

Try hard and succeed = high self-worth



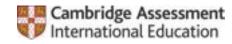


In your school, is students' worth, or value measured solely or mainly by grades?

Try hard, fail = low self-worth.

- Consequences:
 - Ashamed of failure
 - Leads to low engagement





Positive schools widen the routes to success and self-worth







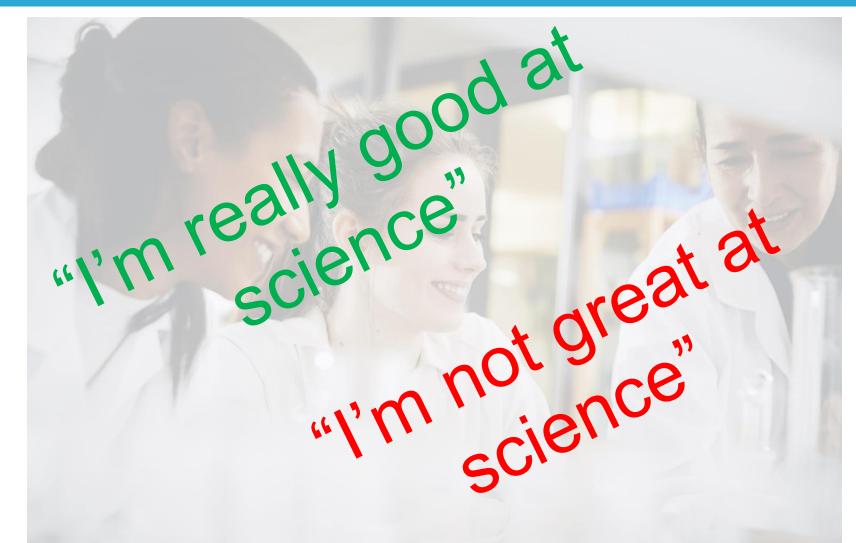






Self-efficacy theory

 Self-efficacy is a person's sense of their capability to perform a particular task



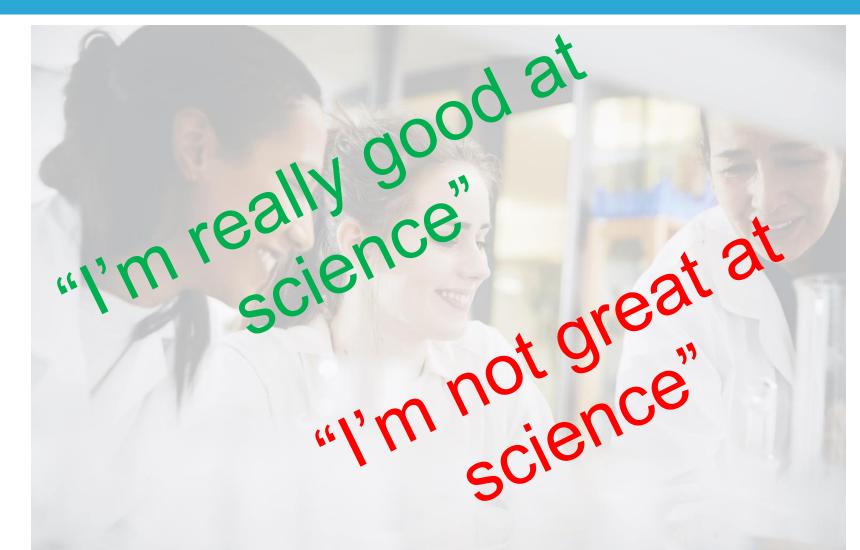


What do they think, and how strongly do they think it?





- High self-efficacy
 - engages in difficult or challenging work
- Low self-efficacy
 - avoids engaging in tasks they see as difficult or challenging



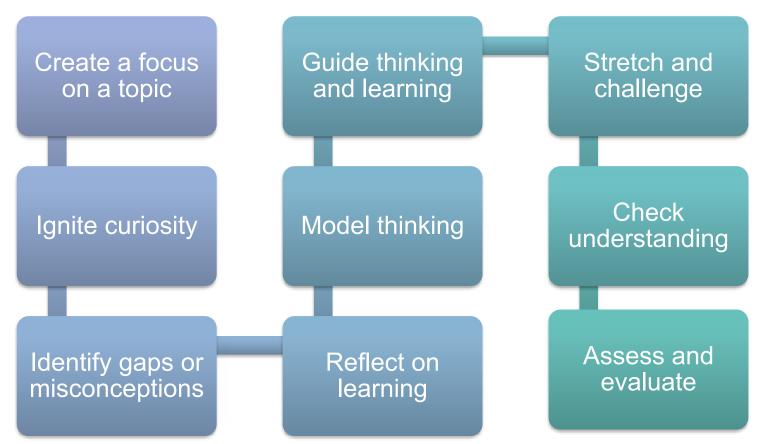


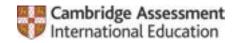
What can you do to build or reinforce students' self-efficacy?

Provide just the right amount of challenge by planning and teaching well, with your focus on individual learning



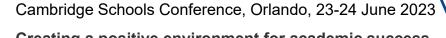
What can you do to build or reinforce students' self-efficacy?





What can you do to build or reinforce students' self-efficacy?

Adapt activities and questions to your students, require them to think and build knowledge step-by-step, gradually increasing demand.



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Draw, Identify, Locate, Label, Select, Write, Outline, List, Name, State, Record, Repeat, Tell, Investigate, Define, Memorise, Recite

Explain, Confirm, Infer, Convert, Describe, Paraphrase, Estimate, Predict, Match, Discuss, Summarise, Defend, Interpret, Express, Change, Voice-over

Apply, Modify, Build, Construct, Solve, Report, Sketch, Produce, Use, Make, Draw, Choose

Analyse, Sort, Differentiate between, Examine, Compare, Categorise, Classify, Distinguish, Subdivide, Contrast, Rank

Combine, Generate, Design, Plan, Devise, Hypothesise, Revise, Compose, What if?, Organise, Develop, Create, Rearrange, Predict, Improve

Critique, Criticise, Appraise, Assess, Conclude, Justify, Judge, Rate, Decide, Consider, Relate, Recommend

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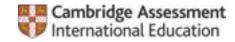
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Locate the xylem **Describe** its structure Build a model of the root to show the three dimensional structure of the xylem **Compare** your model with that of your neighbour Predict what would happen to the plant if the xylem were not there Write a critique of your neighbour's model



Question Grid	Is/Does? Present/ State/	Did? Past	Can? Possibility	Could? Prediction Probability	Might? Suggest Imagination
What?					
Where?					
When?					
Who?					
How?					
Why?					



Attribution theory

Making learning dependent on effort and thinking can also help students to attribute their success appropriately to themselves and their efforts.

Ideas about intelligence	Internal	External
Fixed	"I did badly because I am stupid" "I did well because I am clever"	"I did badly because the exam was hard" "I did well because the exam was easy"
Flexible	"I did badly because I didn't work hard" "I did well because I worked hard"	"I did badly because the teacher was rubbish" "I did well because the teacher was good"

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Goal theory

Students who...

- have high self worth
- high self-efficacy
- attribute success to internal factors like effort
- have flexible views of their own intelligence

Will...

- approach learning for learning's sake
- addressing (and not avoiding) challenges

These students have 'learning' or 'mastery' goals





Goal theory

Students who...

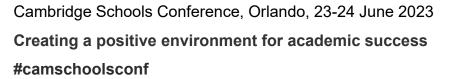
- care about external measures of success
- care about how others judge them

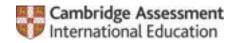
Are more likely to...

- have fixed views of their own ability
- see challenges and difficulties as threats

These students have 'performance' goals







Goal theory

Performance approach goals

- Students who are self-confident
- Engage in learning to feel successful and competent
- Performance avoid goals
- Low self-confidence
- Disengage from learning so they do not fail





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Motivation

What does theory tell us about creating positive classrooms: an interim summary



How do we foster positive environments for students' learning?

Set tasks which

- a) give students experience of success,
- b) show them that effort can improve performance,
- c) have the right level of challenge,
- d) build ideas step-by-step
- e) have opportunity for teacher support
- Foster a cooperative environment, where students help each other, working together, and building on each others' ideas in small-group and class discussion

Ensure students see value in what they are learning, and tell students that they are able to learn it

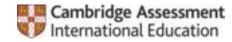


How do we foster positive environments for students' learning?

- Value struggle, and ask students about the mistakes they made, and how they overcame them, using those students' testimony as a model for others
- Encourage students to recognise their progress, comparing achievement with previous work, and assessing their own work, giving them frequent, detailed and positive feedback
- Provide a variety of school subjects, and a variety of extra-curricular activities to maximise the chances that a student will have opportunity to thrive in at least one area of their school life



- have high self-efficacy, with flexible ideas about their ability, and believe that success is internally controlled, for example, through effort
- have self-worth, feeling themselves to be competent and knowledgeable, and able to master ideas and challenges
- work with, and feel supported by, their teachers and their peers



- are self-efficacious, with flexible ideas about their ability, and believe that success is internally controlled, for example, through effort
- have self-worth, feeling themselves to be competent and knowledgeable, and able to master ideas and challenges
- work with, and feel supported by, their teachers and their peers

'for healthy development, individuals require support for basic psychological **needs**: autonomy, competence and relatedness'

Ryan & Deci (2020)



Relatedness

"... a sense of belonging and connection.It is facilitated by ... respect and caring."

Ryan & Deci (2020)





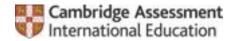
Competence

"...the feeling of mastery, a sense that one can succeed and grow.

The need for competence is best satisfied within well-structured environments that [offer] optimal challenges, positive feedback, and opportunities for growth."

Ryan & Deci (2020)







Autonomy

"... a sense of initiative and ownership in one's actions.

It is supported by experiences of interest and value and undermined by experiences of being externally controlled, whether by rewards or punishments."

Ryan & Deci (2020)





"Satisfaction of basic psychological needs of autonomy, competence and relatedness facilitates greater intrinsic motivation and engagement"

Ryan & Deci (2020)



Amotivation		Extrinsic Motivatio	on	Intrinsic Motivation
		Autonomy		
 Lack of perceived competence Lack of value Lack of relevance 	 External reward or punishment Compliance 	 Ego involvement Focus on approval from self and others 	 Personal importance Conscious valuing of activity Self- endorsement of goals 	 Interest Enjoyment Inherent satisfaction
				Ryan & Deci (2020)

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Behavioural engagement: the active participation and involvement of the student in social groups, classroom interaction, study—both at school and home—and extracurricular activities related to school.



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Cognitive engagement: the student's personal investment in learning activities, [taking responsibility for their own learning], the commitment to mastery learning and the use of studying strategies.



Amotivation	Extrinsic Motivation	Intrinsic Motivation
	Autonomy	
 Lack of perceived competence Lack of value Lack of relevance 	reward or punishment • Compliance involvement involvem	ersonal Interest portance Conscious aluing of ctivity elf- ndorsement f goals Interest Interest Inherent Satisfaction Inherent Inderest Inherent

Emotional engagement: including **enjoyment**, support, belonging and **attitudes** towards teachers, peers, **learning** and school in general.

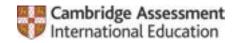
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As students become more autonomous...

- More effort, more behavioural engagement, more cognitive engagement (Leon et al. 2015)
- More perceived competence, more self esteem (Deci et al. 1981).
- Less stress (Reeve and Tseng 2011)
- More wellbeing (Sheldon and Krieger 2007)
- More emotional engagement (Streb et al. 2015)
- Exam results get better (Howard et al. 2017, Grolnick et al. 1991, Guay et al. 2010, Katz et al. 2014)

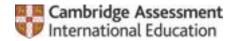


"When teachers are autonomy supportive, they are usually also supportive of students' other basic psychological needs (competence and relatedness) as well."

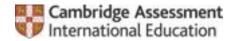
Ryan & Deci 2020



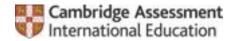
(Ryan and Deci 2017; Bao & Lam 2008; Reeve et al. 2003; Murayama et al. 2015; Schutte & Malouff 2019; Patall et al. 2008; Tsai et al. 2008; Reeve & Jang 2006; Ryan and Deci 2020)



Understand, acknowledge and be responsive to students' interests and perspectives.



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- Give students chance to take ownership of their schoolwork, giving them tasks that engage their interests, and in which they see value.



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- Offer students choice, increasing their ownership of activities, and increasing performance and curiosity.



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- Respond to students' questions, but resist giving immediate answers, instead prompting students to reach the answers themselves.



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- Provide a rationale for learning activities, helping students to see those activities as relevant.
- Offer students choice, increasing their ownership of activities, and facilitating performance and curiosity.
- Respond to students' questions, but resist giving immediate answers, instead prompting students to reach the answers themselves.
- Listen to students more, and talk less, giving fewer direct instructions.







"Supporting autonomy is not about permissiveness, but about helping to catalyse students' willingness to engage in learning through well-organized learning environments and activities" (Ryan and Deci 2020)

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clear expectations

appropriate challenge



Reinforced fixed ideas of intelligence



Avoidance of challenge

What happens if you don't foster students' autonomy? (Yu et al. 2016)

Fear of failure and performance-avoid goals



Anxiety and depression

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- Positive classrooms are classrooms where students are behaviourally, cognitively and socially engaged.
- Engagement is a product of students' motivation.
- Students' motivation becomes more intrinsic, and engagement more positive, if teachers build students' autonomy, perceived competence and relatedness.
- Use of autonomy-supportive strategies in the classroom leads to greater autonomy, perceived competence and relatedness.



Case study 1

Alma is a 12 year-old and is an average student in most subjects but she is doing poorly in science. Tests are often handed in with many unanswered questions. Sometimes correct answers had been written but were erased. Alma occasionally spends science lessons in the sick bay, claiming a headache, stomachache, or some other ailment that disappears about the time her science lesson ends.

For the first few weeks of the term, Alma's science teacher frequently asked Alma questions in an attempt to elicit her participation and to assess her understanding of the concepts that were explained to the class. But she usually refused to participate, and the teacher, sensing that Alma was uncomfortable when questions were addressed to her publicly, stopped trying to engage her in class discussion.

In contrast to her class performance, assignments that Alma can take home are often returned completed and mostly correct. The teacher knows from conversations with Alma's parents that she does her homework on her own. Her science teacher is puzzled by her reticence in class because she knows from Alma's homework assignments that she could figure out the answers if she tried.



Case study 2

Sally is predicted to achieve the top grades. In many respects, Sally is a perfect student: well behaved and dependable. A superficial look at her would reveal no motivation problems.

Sally perceives a "B+" as a disastrous blemish on her record, something to be avoided at all costs. A careful look at Sally's perfect record reveals a series of courses that offered little challenge.

Sally religiously follows directions for every assignment. She is tuned in to her teachers and has an astonishing ability to predict what material will be stressed on tests. Sally over studies for every test, repeatedly reviewing the text and memorizing every possible fact that she might be asked to recall. She rarely reads anything that she is not required to read for a course.

Sally is anxious, but her anxiety is not debilitating within the context of the intellectual demands she allows herself. She is constantly reinforced by teachers for her achievements, and she appears to be academically self-confident. She enjoys the respect of her classmates and is socially active.

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Case study 3

Hannah has been sitting at her desk for nearly half an hour doing, as far as the teacher can tell, nothing. The teacher urges Hannah to try one of the questions she is supposed to be working on. "I can't," claims Hannah without even looking at the problem to which the teacher is pointing. She adds, "I don't understand what I'm supposed to do." The frustrated teacher replies, "But I just went over a problem like it on the board-weren't you listening?" "I don't understand," Hannah repeats.

The teacher goes through the working of the problem step by step, asking Hannah questions along the way. Hannah answers most of the questions correctly. She obviously has at least some understanding of the problem. "See, you know how to do these kinds of problems," the teacher observes. "Why don't you try one on your own now?" "I don't know how," Hannah stubbornly declares. "But you knew the right answers to my questions," the teacher responds. "You were helping me," Hannah readily replies. Not to be fooled, the teacher concludes firmly, "I think you know how to do these, and I want you to try some of the problems."

The teacher has the last word and turns her attention to another student, leaving Hannah alone with her problems. Later, she passes by Hannah's desk and finds no progress. The scene just described is repeated, as it has been so many times that year, and the end result is an exasperated teacher and a student who interprets the teacher's despair as confirmation of her own lack of competence.

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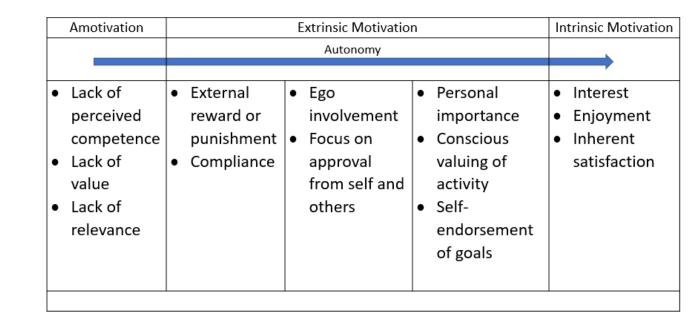
Motivation

How does school policy erode students' motivation and engagement?



1. Effect of grades on student engagement

- Development of performance goals
 - Approach (for ego)
 - Avoid (to avoid shame)
- Desire to outcompete
 - Ego-satisfaction
 - Comparison of grades with others



Grades are therefore controlling, do not increase autonomy, and lead to lower engagement and less positive students



1. Effect of grades on student engagement

- GroInick and Ryan (1987)
 - ▶ lower intrinsic motivation \rightarrow lower conceptual learning
- Klapp (2015)
 - Iower attainment
- Butler et al. (1987)
 - Iower autonomous motivation, especially for high attainers



1. Effect of grades on student engagement

- Krijgsman (2017)
 - Iess intrinsic motivation
 - more amotivation
 - more fear of failure
- Pulfrey et al. (2011)
 - even expecting to be graded led to students being less autonomously motivated
 - and more likely to adopt performance avoidance goals



2. Effect of high-stakes tests on student engagement

- Teachers and schools are given extrinsic and controlling incentives or sanctions related to students' test scores.
- Because of this, they focus only on material which will be examined, and only on memorization of that material.
- Activities that are interesting, enjoyable, engaging, or valued by students, and which will exploit and enrich students' development, are dropped.
- This reduces students' intrinsic motivation and autonomy (Sun et al. 2013, Yu et al. 2018).

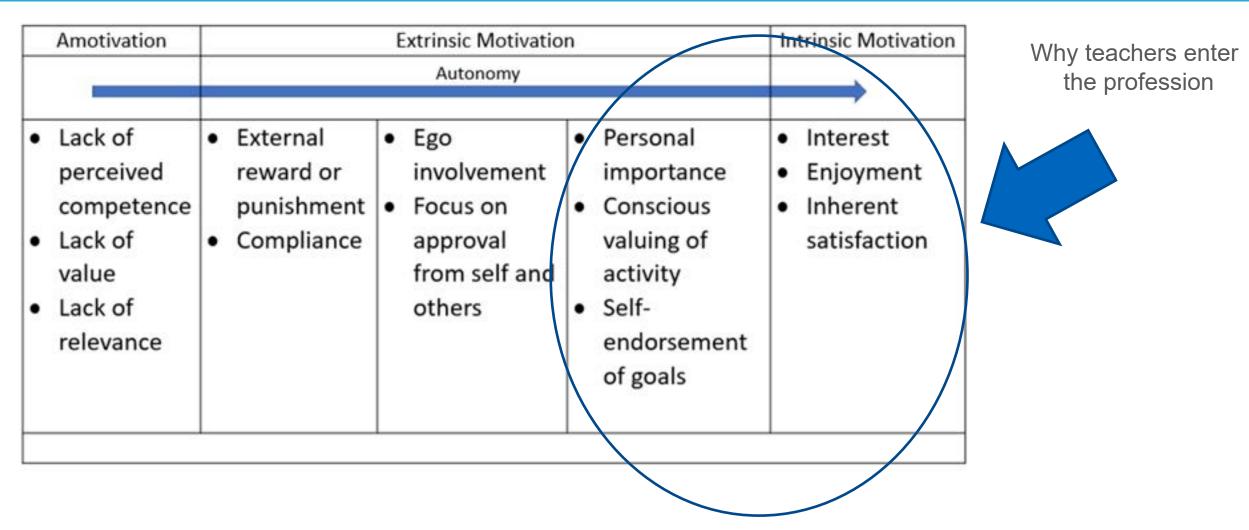
Cambridge Assessment International Education

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	Autonomy			
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Teachers also have basic psychological needs of competence, autonomy and relatedness



Impact of autonomy on teachers



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Impact of autonomy on teachers

- Less autonomy \rightarrow
 - Iower perceived competence
 - more emotional exhaustion
 - less sense of accomplishment (Fernet et al. 2012)
 - Iower vitality
 - more exhaustion (Cuevas et al. 2018)
- More autonomy \rightarrow
 - more intrinsic motivation
 - better psychological wellness
 - less work stress
 - more job satisfaction (Nie et al. 2015)





consistent rules and guidelines



"Supporting autonomy is not about permissiveness, but about helping to catalyse teachers' willingness to engage in teaching and learning through well-organized learning environments and activities" (Ryan and Deci 2020)

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appropriate challenge



Do teachers have enough autonomy in your school?

Teacher autonomy increases when school leaders use autonomy supportive approaches

Teacher autonomy reduces because of negative pressures from above (accountability policies or administrators) and below (disruptive students and expectations of parents)



Do teachers have enough autonomy in your school?

How does your school already promote teacher autonomy? How does your school restrict teacher autonomy?

What action can you take to promote teacher autonomy?

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Why else is teacher autonomy important?

- If teachers are more autonomous, students are more autonomous (Roth et al. 2007)
- If teachers become less autonomous, they support students' autonomy less (Pelletier et al. 2002)
- If teachers are more autonomous, they have more autonomy support for students (Nie et al. 2015)



Key messages



Positive classrooms need positive students and positive teachers



Positive students and teachers have high behavioural, cognitive and emotional engagement



Engagement is a product of motivation



There are lots of ways of thinking about motivation, all of which can be useful to make sense of your classrooms



Supporting students' and teachers' psychological needs (in particular autonomy) leads to greater engagement



Supporting students' and teachers' psychological needs (in particular autonomy) leads to more positive learning environments in every classroom



And this generates...

Positive teachers

Positive students

Positive classrooms





Thank you Any questions?

