Interdisciplinary research on the science of learning

How to Motivate Students and Promote Belonging

Sources of Intrinsic Motivation:

Competence (I can do this)	Challenge (I'm in the zone)
Control (I choose/We choose)	Curiosity (I want to know more)
Context (I find this meaningful)	Community (This is what we do)

ISSUE:	INSTEAD OF THIS:	TRY THIS:	REFLECTION QUESTION
Extrinsic motivation	Gold stars or awards for performance	Progress bar for learning	Does this promote lasting motivation?
Context	Everyday context	Fantasy, personally relevant, or altruistic context	What could make this more exciting or meaningful? Do students see useful applications for what they're learning?
Growth Mindsets about Ability	Praise for being smart or fast	Praise for persistence and effective strategies	Are students learning that growth is more important than effortless success?
Growth Mindsets about Ability	Students take test and move on	Students can earn extra points by fixing mistakes or incorrect answers: "You didn't get that YET"	Is revision expected and valued? Are mistakes seen as opportunities for growth?
Belonging/ Community	"You're on your own"	"We're in this together"	Do students feel connection and shared purpose?
Stereotypes	Comforting feedback: "Not everyone is a math person"	Inspiring feedback: "I have high expectations and know that you can reach them"	Does feedback reinforce or actively counter stereotypes?
Stereotypes	Showing 5 famous male mathematicians	Showing 3 female and 2 male mathematicians	Who is seen, heard, and valued?