

### Supporting Learning and Success in Online Courses: Attending to Learning Skills and Mindsets

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# Agenda

- Introduction and light priming activity
- Perspectives from the Field: Supporting SDL in Online Courses at Palm Beach State College
- Questions and Discussion





# **Learning Objectives**



- Describe a set of evidence-based skills and mindsets that can support student learning and success in online learning environments.
- Identify course design features and instructional strategies that support students to develop these skills as a course progresses.



# **Persistent Inequalities in STEM Courses**

- Chronically high failure rates in gateway STEM courses required for fields that are key pathways to economic mobility and higher pay
- Black and Hispanic students less likely to attain STEM degrees
- "Weeding out" courses alienate students of color
- Focus on meritocracy and competitiveness
- Faculty of color underrepresented in STEM



# What is the Postsec Collab?



A research and capacity-building center that aims to study and improve **how faculty teach** and **use technology** to help students build **self-directed learning skills** and increase students' success in postsecondary **online STEM courses**.





# **Postsec Collab & Our Partners**

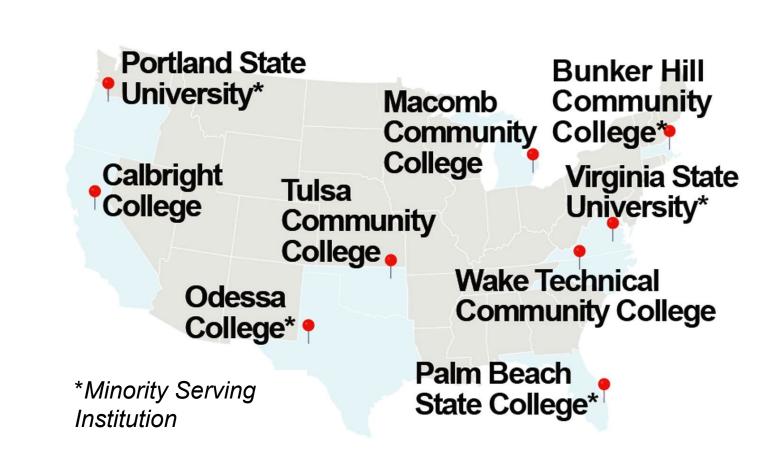
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# **Postsec Collab Research**

 Qualitative research to shed light on institutional policies and practices (IPP) and instructional environments needed

 Rapid cycle experiments (RCEs) to test and refine technology-enabled instructional strategies

2022-2023

 Develop and pilot-test an integrated instructional model that uses tech features to deliver SDL instruction

2023-2025

2021-2022





# Why This Focus?





COVID has increased the urgency for research and support to improve teaching and learning in online courses



Higher education needs more information about strategies to improve equitable outcomes in online courses



The need for strong self-directed learning skills may be more profound in online courses, especially in STEM



# Why Focus on Self-Directed Learning?

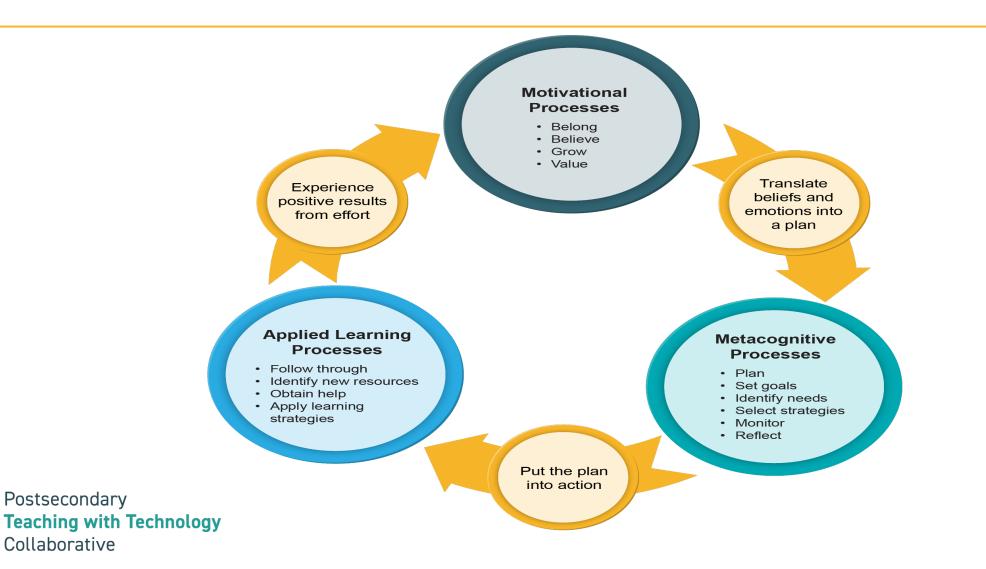
- Online learning mostly independent
- Successful students have strong SDL skills
- Many students haven't developed SDL skills
- Student success courses and services support some skill acquisition
- SDL skills development & mindsets must be supported through intentional instructional strategies





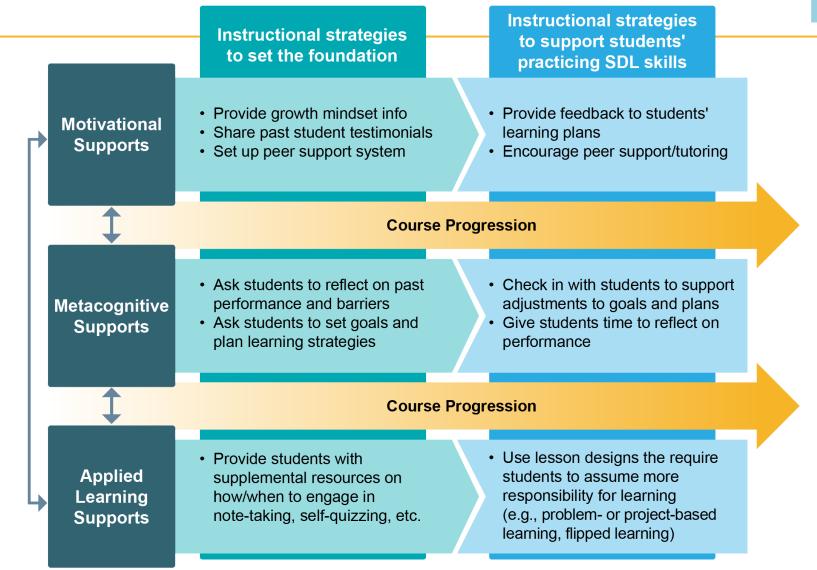
# **Self-Directed Learning Skills**

Collaborative





# **SDL Instructional Support**



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# Examples of technology-supported strategies

Some students believe initial failure means they don't belong in a class



Some students need real time adjustments to improve performance



Students do not feel safe admitting they do not understand



Set up automated prompts focused on goal setting, task planning, etc.

Assign video explaining

science of learning and

growth mindset

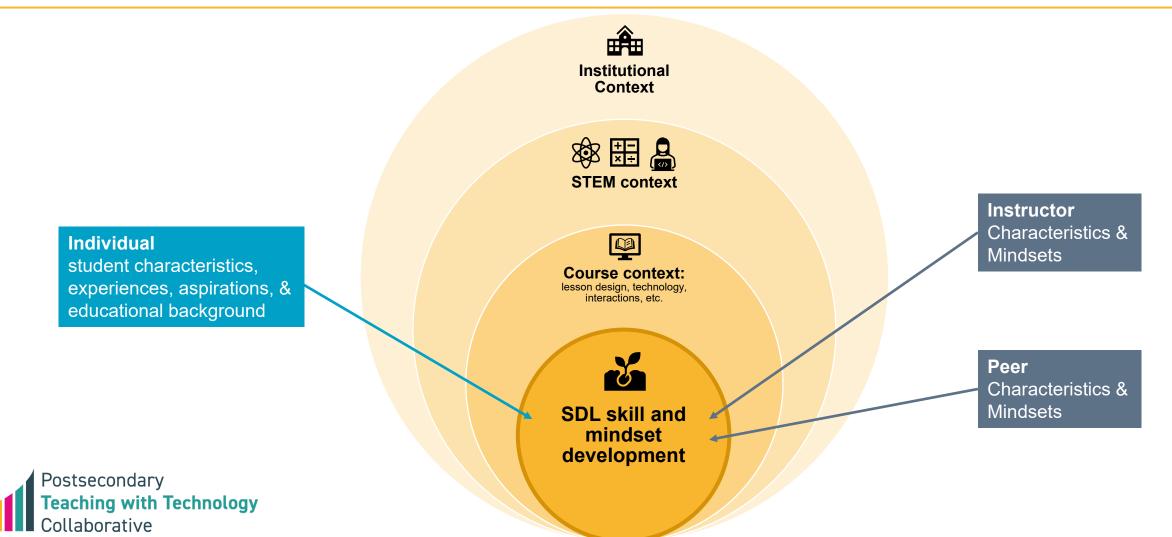
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Use technology to support peer communication and help seeking





## **Ecological Perspective of SDL Development**



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# Perspectives from the Field: Palm Beach State College



# Thank you!

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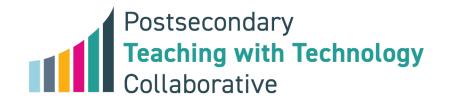
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