

Five Design Principles for Resilient Teaching

Adaptability and redundancy: This fall we may face changing public health guidance that means we have to adapt our teaching and courses quickly. Considering ahead of time how to accomplish our learning objectives in different modalities can help us transition smoothly into possible pivots. Additionally, finding ways to build some level of flexibility (deadlines, amount/type of work) and shared ownership over the course design can help support faculty and students' motivation and well-being throughout the semester.

Adapt

Prepare

Resilience: "The ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions." Presidential Executive Order 13653, Preparing the U.S. for Impacts of Climate Change (Nov. 2013)

apply what was learned from past events

Recover repair damage from recent event

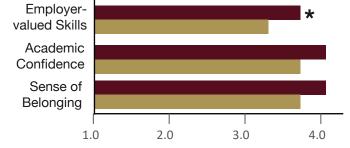
Prepare to minimize impacts of upcoming events

Absorb reduce damage during event

Purpose-driven use of technology: Physically-distanced in-person or online environments offer different affordances for faculty and for students; both benefit from thoughtful use of technology designed to *help students achieve the course learning outcomes*. To limit cognitive load for yourself and for students (who may be using multiple different technologies in each class) select the *simplest technology* that will do what you need and *limit the number of novel technologies* students must master in addition to content. Factor such as cost, data security, and whether a technology is vetted/supported by Elon may also come into play.

Transparency: When students understand the *real-world value* of what they are learning and the instructors' expectations around *how to complete assignments* and *what success looks like*, their learning and retention are enhanced. Under novel or potentially shifting instructional circumstances, a *clear and explicit two-way communication plan* may include regular surveys of student expectations and lived realities, an established routine and technology for communicating course plans or deadlines, and activities that help align instructor and student expectations.

Student learning in less (mustard) vs. more (maroon) transparent courses



Winkelmes, Bernacki, Butler, Zochowski, Golanics, & Weavil (2016). A teaching intervention that increases underserved college students' success. *Peer Review*, 18(1/2), 31. Relationship-rich engaged learning: Trusting, mutually-supportive learning community is at the center of an Elon education, and of many modern theories of learning. For example, the Community of Inquiry framework (Garrison et al., 2000) guides instructors to design community via three types of elements:

- elements that foster "social presence" among students who come to know and support one another;
- elements that foster "teacher presence," helping students feel they know the instructor and that the instructor cares for them and their learning; and
- elements that foster "cognitive presence,"
 as all members of the community think,
 explore, and learn course content together.
 In practice, these three elements overlap and
 interplay.

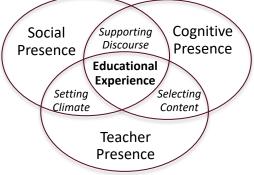


Image after https://coi.athabascau.ca/coi-model/

Teaching in times of trauma: Every member of our community has experienced the COVID-19 pandemic differently, but a set of common challenges suggest a set of common strategies and supports.

- Strive for equity: Home learning this spring highlighted inequities in our
 community ranging from quiet space for coursework to laptops and internet
 access. This fall, additional challenges to equity may develop as individuals
 require different levels of physical distancing. Finally, consider ways to mitigate
 the impact that implicit biases around identity characteristics such as race,
 gender, and/or LGBTQIA status might have on course or interpersonal dynamics.
- Balance structure and flexibility: Structure provides certainty and regularity, giving order to students' experience of the semester; however, balancing this structure with flexibility (see Adaptability principle) can help mitigate potential inequities as individual students' experience the fall semester differently (e.g., illness, mental health challenges, practical and logistical constraints).
- Consider the cognitive load of stress: During moments of intense stress, our brains have limited cognitive and attentional load available for other cognitive tasks, such as learning. Consider ways to limit disciplinary content to "musthave" learning outcomes, create space for learning outcomes related to students' lived experience and personal development (see bullet below), and provide flexibility (see Adaptability principle) both across the board and to individuals (see above two bullets).
- Design to support student motivation: Research on motivation suggests that students are more likely to stay engaged if they understand how classwork applies to their lives, especially in the near or immediate future; if they experience meaningful relationships with the instructor and other learners; if they feel a sense of ownership over the course, and/or have meaningful choice about how to practice and demonstrate their learning; and if they believe they will be able to succeed in the course.