

Focusing on the Forest (Not Just Leaves) when Preparing Faculty for and Assessing Online Course & Curriculum Design

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Overview of presentation

- Online Teaching Efficacy (OTE)
- Online and Hybrid Teaching Institute Structure
- Research Design, Scaling the Institute, Data Collection
- Preliminary data analysis, feedback, and data-based adjustments
- Looking to the future

Efficacy – Quick Overview & Framework

- One's self-beliefs about their ability to succeed in a particular setting or behavior (Bandura, 1977, 1986, 1997)
 - Domain specific (Barry & Finney, 2009; Bandura, 1986)
- Influential on future attempts at and success with target behaviors

Efficacy – Increasing Self-Efficacy

- Verbal Persuasion
 - Motivation related to efficacy increase, most effective when efficacy already present (Bandura, 1986)
- Emotional & Physical State
 - Stress & anxiety may signal dysfunction & lower efficacy (Bandura, 1986)
- Vicarious Experience
 - Observing a similar peer experience with target behaviors (Brown & Inouye, 1978)
- Enactive Attainment
 - Personal mastery experience – most effective (Reubsaet, et al., 2003)

Online Teaching Efficacy

- Faculty participants' beliefs about their ability to teach in online environments
- Institute designed to address a set of target behaviors and approaches aimed at effective online teaching
- Theory of Change:
 - Faculty efficacy should be increased as faculty are provided with expert instruction and support aimed at increasing motivation to succeed (**verbal persuasion**), learn from peers who are successfully teaching online (**vicarious experience**), apply course design principles to their own courses (**enactive attainment**), and minimize anxiety with proper support in design, development, and implementation (**emotional and physical state**).

Why an efficacy frame?

The forest and the leaves

Efficacy has broad applicability to
online / hybrid instruction

- Should map to other courses as
competencies transfer

Maximize impact of institute for faculty
members; therefore students

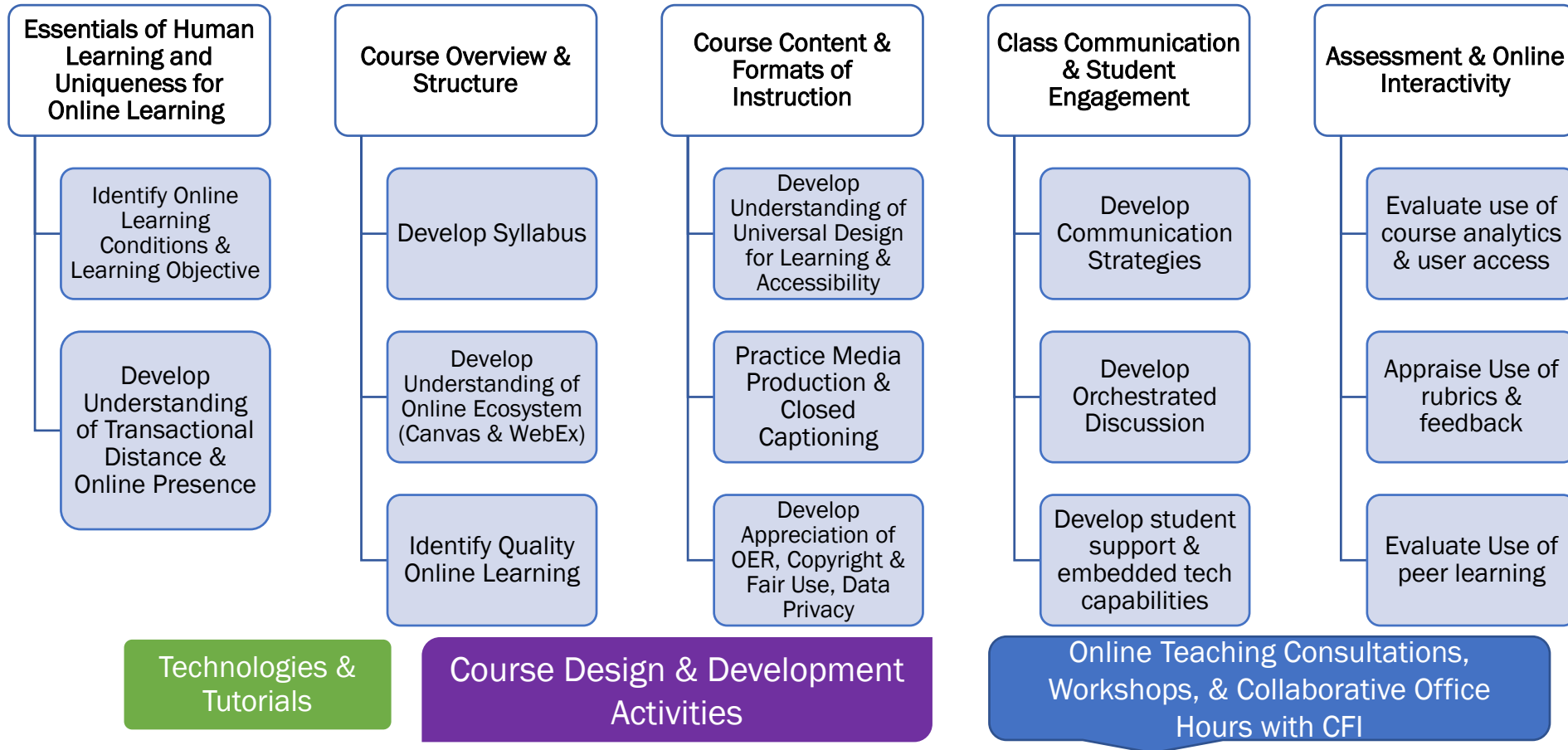
Scalable and transferable to other
faculty development initiatives



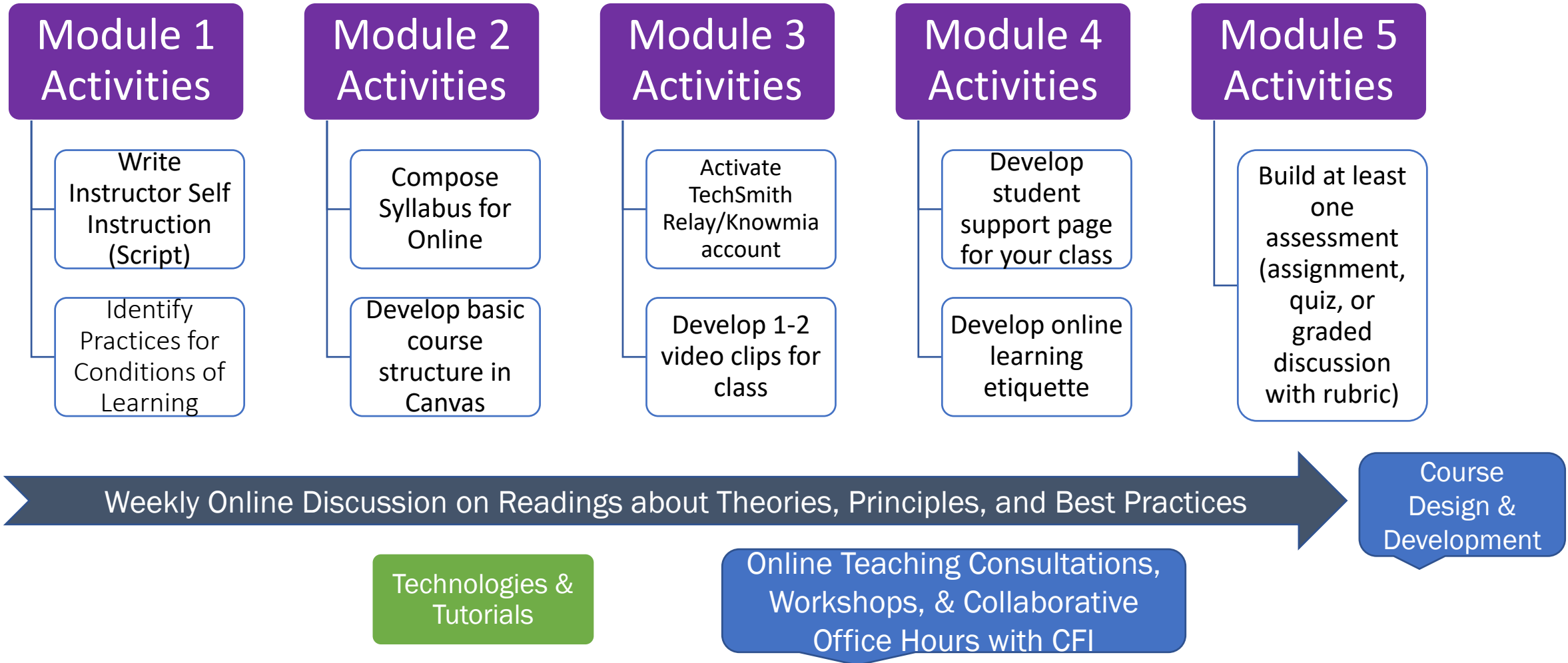
Objectives of Online Teaching Institute

- At the completion of a self-paced scalable curriculum, a faculty member will be able to
 - Revisit learning theories related to online environments
 - Develop an understanding of the instructional design principles and how tools work for interactivity and presence in online learning environments
 - Identify strategies that can optimally support student success in online learning
 - Develop skillsets of teaching with technologies
 - Develop essential course-based practical pedagogy and assessment strategies
 - Build the syllabus and main structure of online components of a course with identified best practices

Design & Development – Five Pre-designed Modules

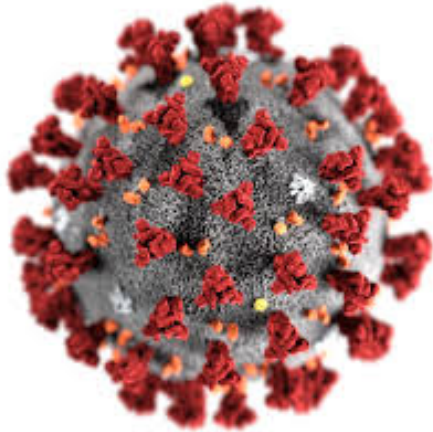


OTE Building Activities (Implementation)



Design, Scale, and COVID

- Fall 2019 - Spring 2020 (12 participants/per cohort)
 - Plan: Pre and post test instruments, post test qualitative, artifact analysis, institute assessment



- Summer 2020 – Fall 2020 (+300 participants)
 - Pre and post test, emergency faculty development model, institute assessment

Efficacy Research & Institute Assessment: Mixed – Methods Design

- Instruments:
 - Online Teaching Efficacy Scale (pre, post) (Robinia & Anderson, 2010)
 - 5 open-ended questions (post)
 - Course artifacts (post)
 - Online Learning Community and Presence Scale (Shea, Li, Swan, & Pickett, 2005) (post)
 - Instructional Design and Organization Feedback (post)

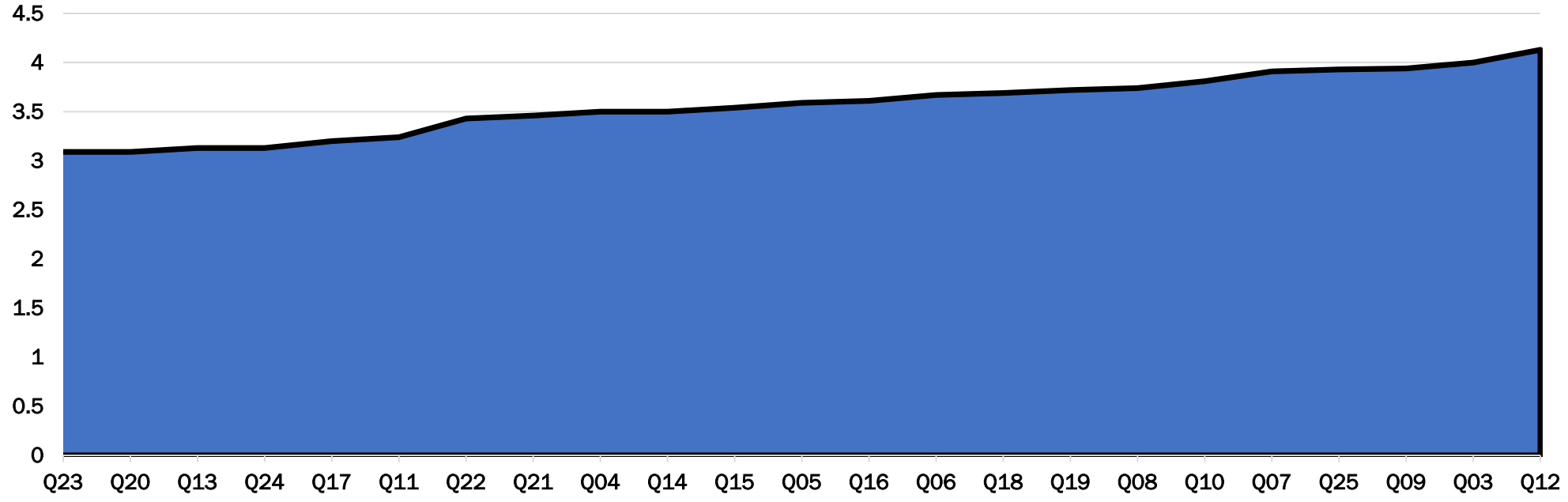
Scaled Institute Self-Efficacy Pre and Post Test Data: Online Teaching Efficacy Scale

Online Teaching Efficacy Scale

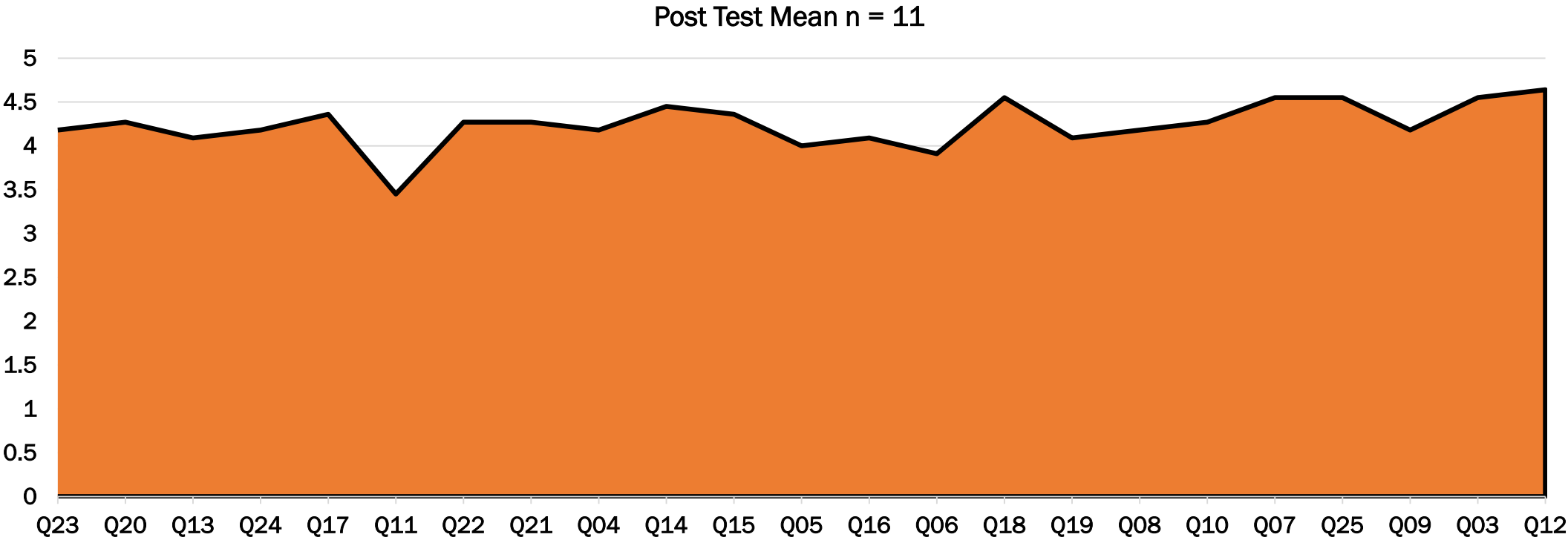
- 21 Likert-type questions
- Sample questions include:
 - How much can you gauge student comprehension of what you have taught in an online course?
 - How well can you establish expectations for an online course (e.g. convey expectations; standards; course rules) with students?
 - How well can you develop an online course that facilitates student responsibility for online learning?
 - How well can you navigate the technical infrastructure at your institution to successfully create an online course?
 - How much can you do to control students dominating online discussions?

Scaled Institute pretest means

PreTest Mean n = 55

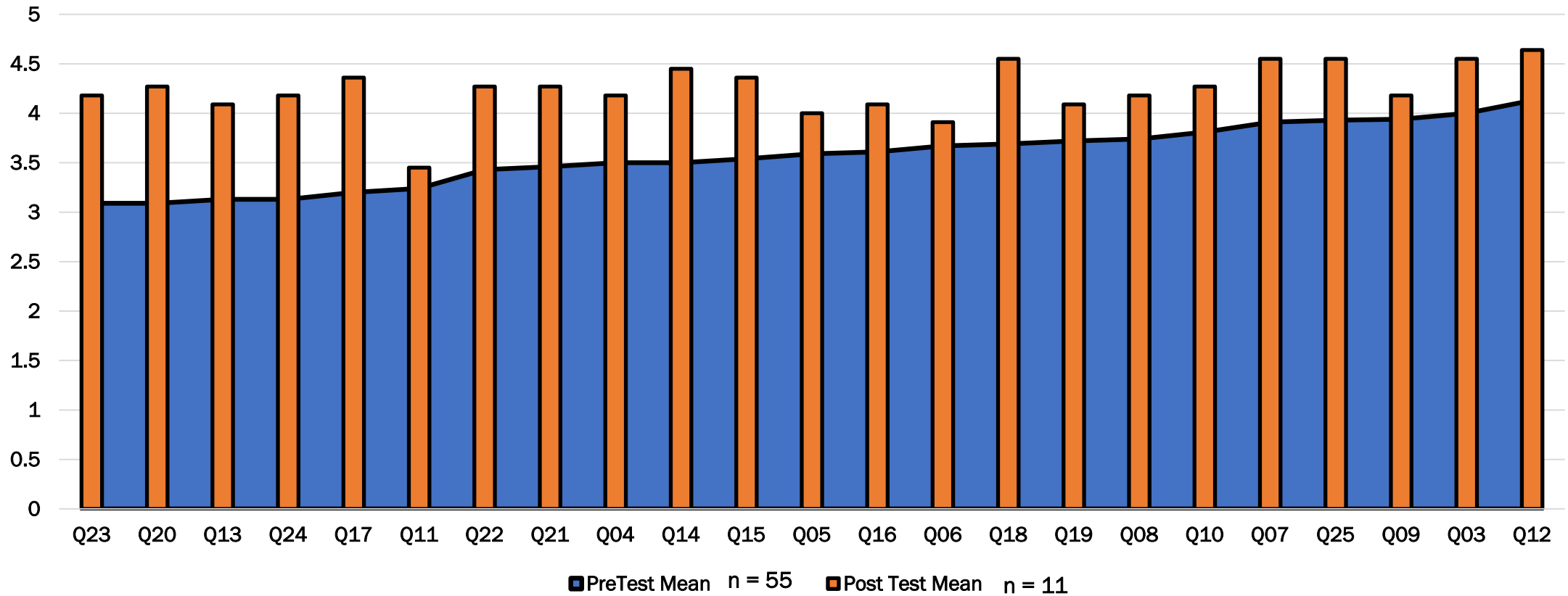


Scaled Institute posttest means



Scaled Institute Pretest & Posttest means

Pre and Post Test Means
**not a statistically significant comparison

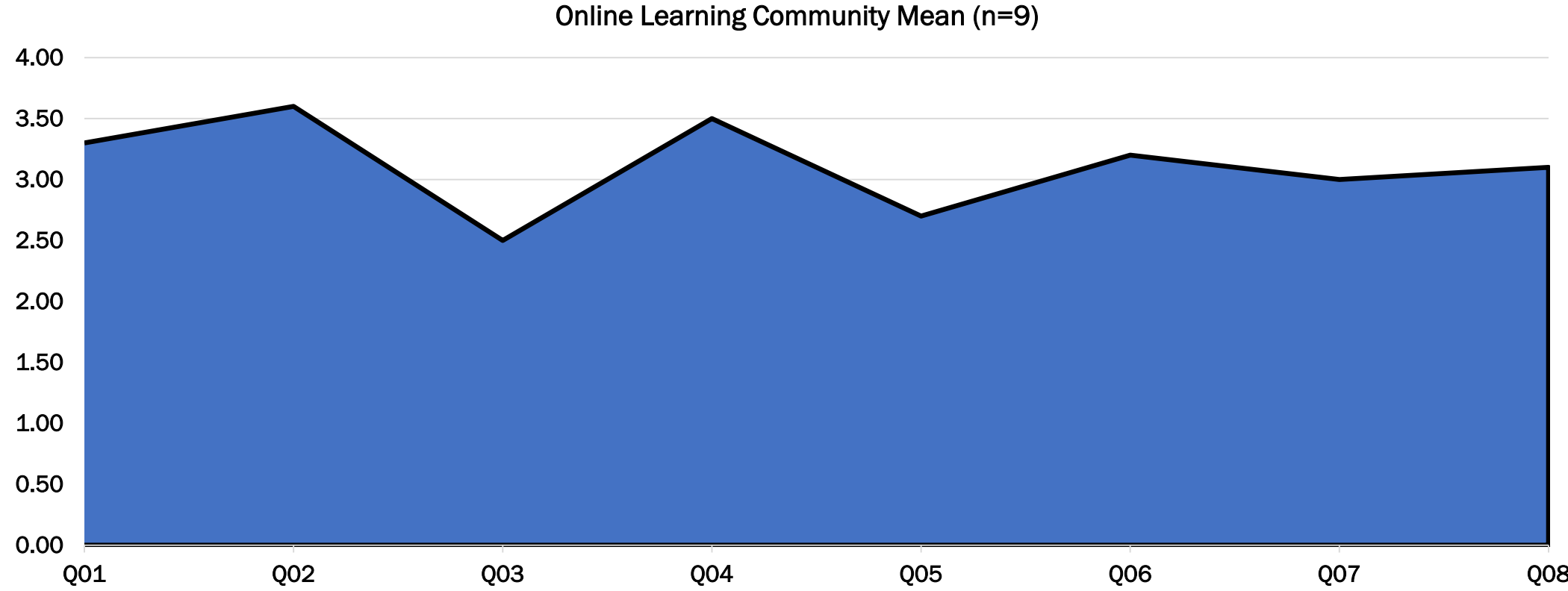


**Scaled Institute Assessment
Quantitative Feedback –
Highlights: Online Learning
Community and Presence Scale**

Online Learning Community and Presence Scale

- 8 Likert-type questions
- Sample questions include:
 - I feel that I am encouraged to ask questions.
 - I feel that it is easy to get help when I have a question.
 - I feel that I can rely on others in this course.

Scaled Institute Online Community Assessment

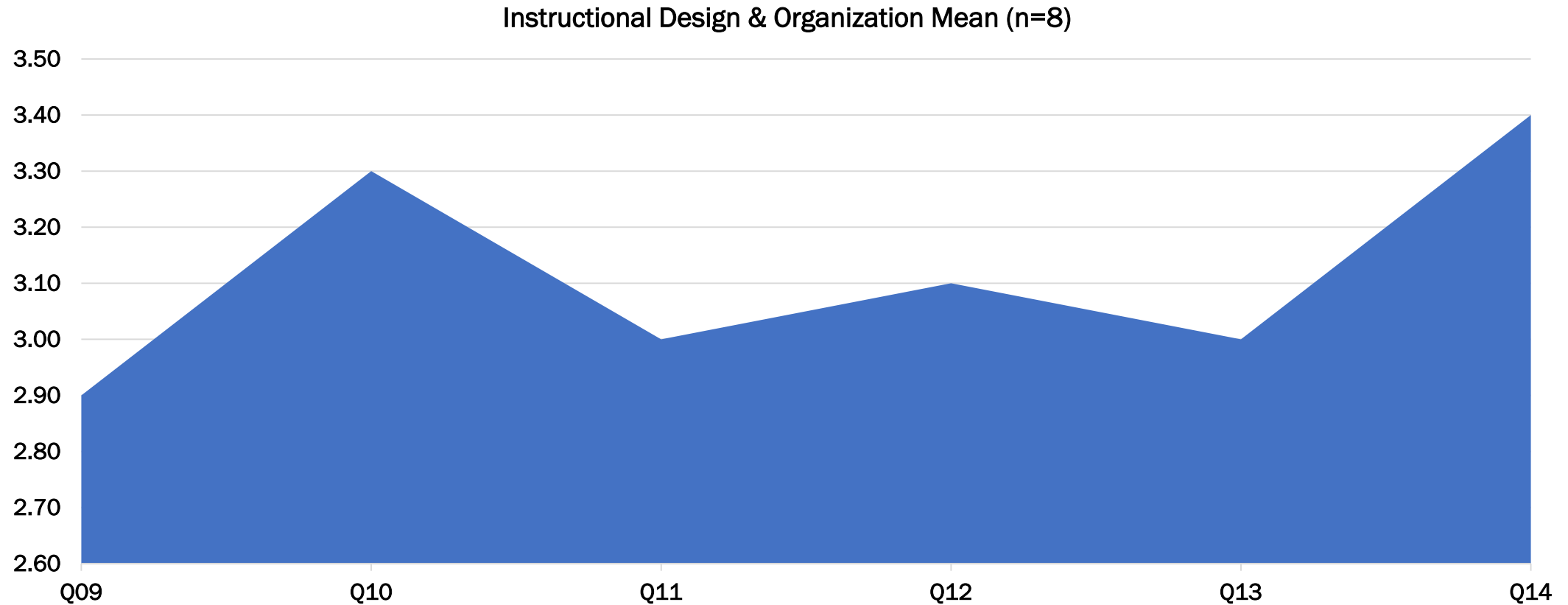


**Scaled Institute Assessment
Quantitative Feedback –
Highlights: Instructional Design
& Organization Scale**

Online Learning Community and Presence Scale

- 6 Likert-type questions
- Sample questions include:
 - Overall, the instructors for this course clearly communicated important course goals (for example, provided documentation on course learning objectives).
 - Overall, the instructors for this course provided clear instructions on how to participate in course learning activities (for example, provided clear instructions on how to complete course assignments successfully).
 - Overall, the instructors in this course acknowledged student participation in the course (for example, replied in a positive, encouraging manner to student submissions)

Scaled Institute Instructional Design & Organization Feedback



Scaled Institute Qualitative Feedback

- Primary feedback themes centered on pacing, sequencing, and the lack of an ability to select specific modules
- Exemplary Comment:
 - “I did not like that the course was sequential and that I couldn't jump around to different topics. I did not have the time to do the entire course and was only looking for certain information. Unfortunately, while I was able to see that certain information would become available to me, I could not access that information until I completed other modules. I would have preferred a course where I can pick and choose which topics I wanted to explore since I don't have a lot of time.”

Assessment Decisions based on feedback

- Primacy of context as a lens for viewing institute assessment feedback
 - Considerations include – emergency nature, university mandate, low response rate
- Feedback themes - pacing, self-selection, sequencing
- Implemented Change
 - Fully asynchronous and sequencing was removed
- Resultant Output Data
 - Course page views by month in 2021
 - January: 20,810
 - February: 21,587

Where do we go from here?

- More comprehensive updates to institute content forthcoming
 - Literature and valid white papers from 2020
 - Pedagogical successes discovered in 2020-2021
 - Communication practices between faculty and instructional designers
 - Updates of links, video, and media content
 - Customized faculty-led mentoring and consultations
- Building community in a large-scale asynchronous institute
- Post pandemic online learning strategy and lessons learned from scaling an efficacy model faculty development institute

Thank you! Please feel free to send questions via email to Aaron Noland (nolandax@jmu.edu) or Juhong Christie Liu (liujc@jmu.edu)