Edson College of Nursing and Health Innovation
Arizona State University

PEDAGOGY-FIRST INSTRUCTIONAL DESIGN FOR INCLUSIVE LEARNING IN HEALTH PROFESSIONS EDUCATION

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EDUCATIONAL TENSIONS & INSTRUCTIONAL GAPS

FACULTY & INSTRUCTION

- Limited pedagogical preparation
- Traditional instructional approaches
- AI uncertainty and instructional hesitation
- Limited data-informed instructional systems

STUDENT LEARNING NEEDS

- Increased anxiety and cognitive load
- Digital and on-demand learning environments
- AI-supported learning behaviors
- Need for flexibility, clarity, and relevance

AI & INSTRUCTIONAL SYSTEMS

- Students increasingly use AI for support and efficiency
- Faculty uncertainty regarding AI integration and academic integrity
- Limited data-informed systems for identifying and responding to learning patterns

These tensions highlight the need for pedagogy-first instructional systems that better align teaching practices with contemporary student learning needs.

PEDAGOGICAL RESPONSE FRAMEWORKS

Inclusive Pedagogy
Supports equity, belonging, accessibility, and learner-centered teaching

Fink's Significant Learning
Connects learning to meaning, application, and long-term relevance

Interactive, Constructive, Active, Passive (ICAP) Framework
Supports deeper engagement through active and applied learning

Classroom Assessment Techniques (CATs)
Provides low-stakes feedback and instructional adjustment

Small Teaching
Supports sustainable instructional improvement through small instructional changes

WHAT THIS ADDRESSES

- Cognitive overload and student anxiety
- Passive and disengaged learning
- Unclear expectations and learning pathways
- Deficit-based interpretations of student performance
- Limited instructional responsiveness to student learning needs
- Fragmented instructional support systems

METHODOLOGICAL LENS

Interpretive Description (Thorne et al., 1997)

FOCUS

- Practice-informed understanding
- Interpretation of instructional patterns
- Responsive educational refinement
- Real-world instructional contexts
- Applied educational knowledge generation

THIS METHODOLOGY SUPPORTS

- Interpretation of student learning patterns
- Context-informed instructional decision-making
- Responsive teaching adjustments
- Iterative instructional refinement
- Development of practical educational supports

WHY INTERPRETIVE DESCRIPTION?

- Focuses on ppplied educational problems
- Prioritizes practice-informed understanding over theory generation
- Supports interpretation within complex instructional environments

INSTRUCTIONAL FEEDBACK & SUPPORT SYSTEM

1 STUDENT LEARNING DATA
Quizzes + Assignments

Identify patterns in:

- Student understanding
- Misconceptions
- Reasoning
- Engagement

2 INSTRUCTIONAL FEEDBACK REPORTS

Highlights

- Learning gaps
- Recurring misconceptions
- Engagement patterns
- Opportunities for instructional adjustment

3 CANVAS FACULTY SUPPORT COURSE

Core Modules

- Inclusive Pedagogy
- Fink's Significant Learning
- ICAP
- CATs
- Small Teaching

Adaptive Supports

- Targeted teaching strategies
- Instructional resources
- Responsive supports

4 RESPONSIVE TEACHING ADJUSTMENTS

Examples

- Clarifying expectations
- Increasing active learning
- Low-stakes formative feedback
- Addressing misconceptions
- Strengthening inclusive teaching practices

5 IMPROVED STUDENT LEARNING SUPPORT

Outcomes

- Increased engagement
- Greater instructional responsiveness
- More inclusive learning environments
- Better alignment between teaching and student learning needs

MOVING FROM REACTIVE TEACHING TOWARD RESPONSIVE, PEDAGOGY-FIRST INSTRUCTIONAL DESIGN

IMPLEMENTATION PHASES

1 BUILD THE CORE CANVAS COURSE

- Shared pedagogical foundation
- Evidence-based teaching frameworks
- Inclusive instructional design

2 LEARNING DATA INTEGRATION

- Quizzes + assignments
- Instructional feedback reports
- Student learning patterns

3 RESPONSIVE INSTRUCTIONAL SUPPORT

- Targeted teaching strategies
- Adaptive instructional resources
- Faculty instructional adjustments

4 EXPANSION & INTEGRATION

- Upper-division integration
- Pre-licensure collaboration
- Scalable instructional support system

Iterative, pedagogy-first instructional refinement informed by real-time student learning patterns

EVALUATION & INTERPRETIVE INSIGHTS

FACULTY LEARNING

- Engagement with Canvas resources
- Instructional awareness
- Teaching adjustments
- Reflective feedback

STUDENT LEARNING

- Learning gaps & misconceptions
- Engagement patterns
- Assessment performance trends
- Areas requiring instructional support

SYSTEM DEVELOPMENT

- Adaptive resource development
- Cross-program collaboration
- Scalability of instructional supports
- Stakeholder feedback

INTERPRETIVE INSIGHTS

- How faculty interpret learning patterns
- How instructional strategies adapt over time
- Alignment between teaching and student learning needs

EDUCATIONAL IMPACT

- Scalable instructional support
- Responsive faculty development
- Inclusive learning environments
- Pedagogy-first AI integration

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Caitlyn Zang, PhD

Biography

Caitlyn Zang, PhD, is a Clinical Assistant Professor and Associate Director of Baccalaureate Health Programs at Arizona State University. She joined the ASU community in 2016 and transitioned into a faculty role in 2023. She holds a PhD in Higher Education from Azusa Pacific University. Her research centers on student success, sexual assault prevention, fraternity and sorority life, and women's leadership.

Dr. Zang brings over 15 years of experience in higher education, spanning Student Affairs, academic program development, and strategic planning. Her work focuses on faculty development, curriculum design, and cross-functional collaboration, with an emphasis on improving student retention and advancing the success of diverse student populations.

Her teaching is grounded in active, constructivist pedagogy and informed by culturally responsive practices and Universal Design for Learning (UDL). She designs learning environments that prioritize real-time application, relational engagement, and accessibility for diverse and neurodivergent learners. Her approach emphasizes meaning-making through interaction, using applied examples and structured engagement to help students navigate complex material.

Committed to building inclusive and engaging academic environments, Dr. Zang's work bridges curricular and co-curricular spaces to support the success of both faculty and students while contributing to broader institutional effectiveness.

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