



UNIVERSITY OF
ILLINOIS CHICAGO

TEACHx
2026

MIND THE GAP: A UDL-INFORMED SCAFFOLDING DESIGN WORKSHOP

ACCESS MATERIALS



Trischa Duke (*she/her*), tduke3@uic.edu

Becky Bonarek (*she/her*), rbonar2@uic.edu

WORKSHOP ROADMAP

1

Scaffolding
Essentials



Define,
distinguish,
and identify
effective
scaffolds

2

Task
Analysis



Reverse-
engineer your
task to find
scaffolding
priorities

3

Design
Your Scaffold



Build pre-,
during-, and
post-task
supports

4

Peer Feedback
& Debrief



Share, refine,
and prepare
to launch
your plan

POLL!

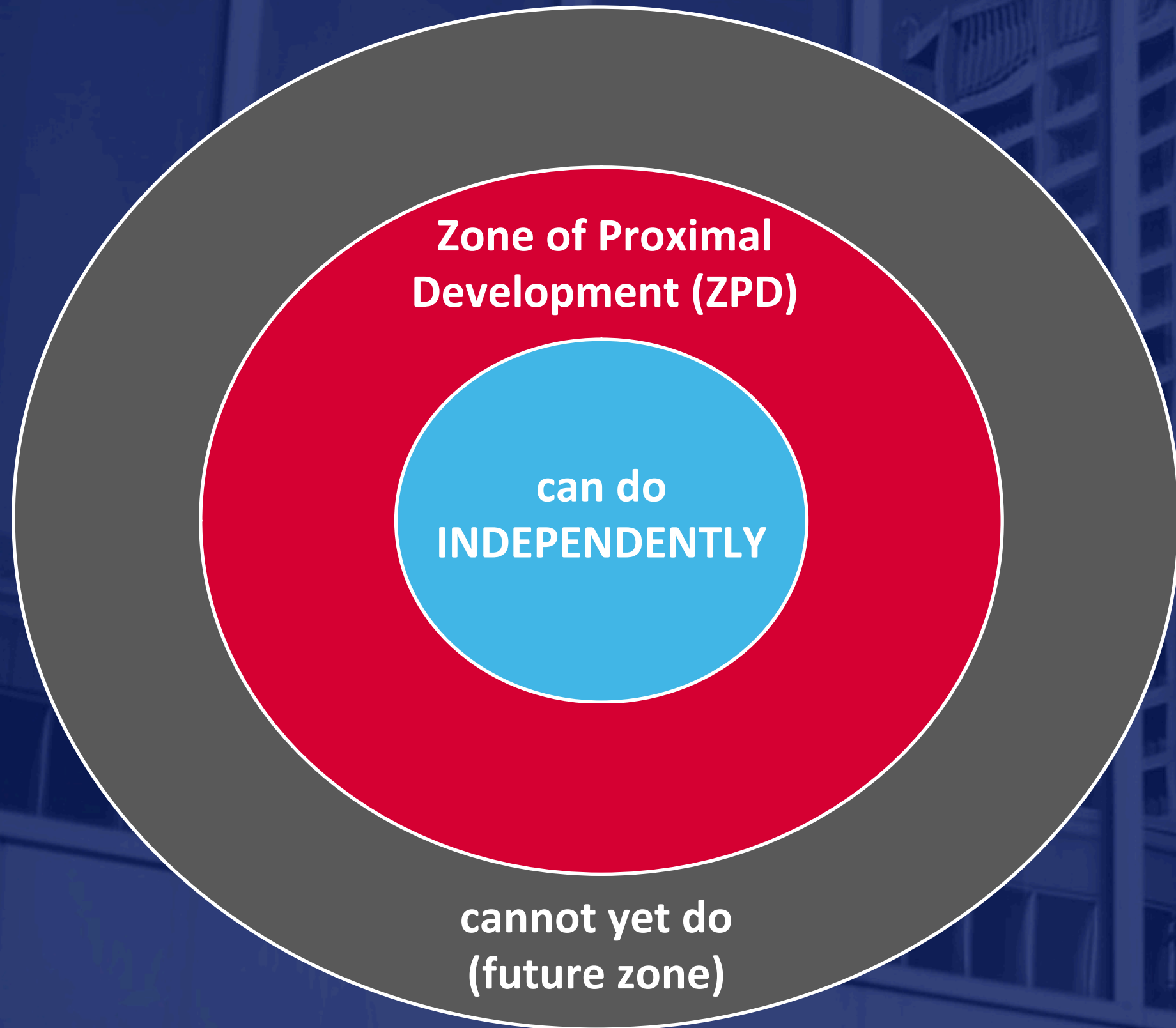
Question: In your experience, why do students struggle to apply content or theories learned in class to novel situations?

Options for answering:

- Go here: tinyurl.com/MindTheGapPoll
- Scan the QR code to the right



WHAT IS SCAFFOLDING?



"The bridge between what learners can do independently and what they can achieve with guidance"

— Wood, Bruner & Ross, 1976

Calibrated: matched to learner ZPD

Faded: gradually removed as learners grow

Adaptive: responsive to individual needs

Transfer-oriented: supports independent application

Equity-promoting: greatest gains in lower-performing students

THE EVIDENCE: WHY THIS WORKS

Greatest Gains for Lower-Performing Students

Aliakbarova & Baizakova, 2025

Task-based scaffolding improved reading comprehension for all students, with low-proficiency learners showing substantially greater gains than their higher-proficiency peers.

Reduces Cognitive Overload

Van Nooijen et al., 2024

Scaffolding manages the flow of new information through working memory, freeing cognitive capacity for deeper processing and learning.

Enhances Metacognition

Sunaryo et al., 2025

Scaffolding embedded in learning stages builds self-awareness by activating the intrapersonal and interpersonal reflection students need to self-regulate.

Promotes Equity in Learning

Bach, Reinhold, & Hofer, 2025

Instructional scaffolding disproportionately benefits students with lower-SES learning profiles, making it a concrete strategy for reducing inequity rather than simply improving average outcomes.

CHARACTERISTICS OF EFFECTIVE SCAFFOLDING

Van de Pol et al., 2010

Contingency

The scaffold is adapted to THIS student's current understanding.



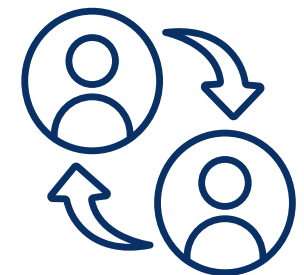
Fading

The scaffold is intentionally removed as the student develops competence.



Transfer of Responsibility

Control over the task progressively shifts from teacher to student.



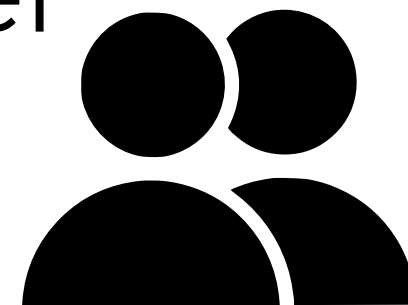
ACTIVITY 1

CONCEPT SORT: WHAT IS SCAFFOLDING?



Activity Directions:

The chart provides strategies and examples of those strategies. Decide if the strategy is a scaffold, permanent support, or another strategy.



BACKWARD DESIGN FOR SCAFFOLDING TASKS

1

DESIRED OUTCOME

What tangible product or skill should students have at the end?

2

COMPONENT STEPS

What skills or sub-tasks are needed to reach that outcome?

3

SCAFFOLDING GAPS

Where will students struggle?
What support do they need?

4

THREE-PHASE TASK

Build pre-, during-, and post-task activities around the gaps.

CATEGORIES OF KNOWLEDGE

CATEGORY	WHAT IT MEANS	EXAMPLES
conceptual	What students need to KNOW (facts, concepts, principles, and why they matter)	Statistics: Understand what a sampling distribution is and why it enables inference Nursing: Understand how medications affect the systems being assessed
procedural	What students need to DO (step-by-step skills, techniques, methods)	History: Cite primary sources accurately with proper attribution and contextualization Nursing: Measure and record vital signs accurately using correct technique
strategic	When/why to apply knowledge (selecting approaches, making judgment calls)	Statistics: Determine which statistical test fits a given research question and data type Nursing: Decide when to escalate a concern to a supervising clinician
metacognitive	How students monitor their own understanding and process (self-regulation, error detection)	Statistics: Catch data coding errors before analysis — not after results look wrong History: Recognize when present-day values are being imposed on historical actors

ACTIVITY 2

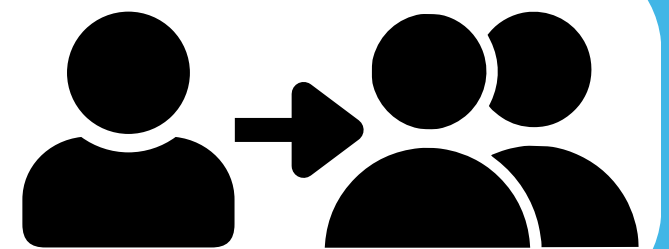
TASK ANALYSIS: WHERE DOES SCAFFOLDING FIT?



Activity Directions:

Work backward from the desired outcome of a task to identify where where scaffolding is most needed.

1. Select one challenging assignment or assessment from your own course.
2. Analyze the task according to the four categories.
3. Identify scaffolding priorities.



DESIGN YOUR THREE-PHASE SCAFFOLD



INDIVIDUAL
WORK

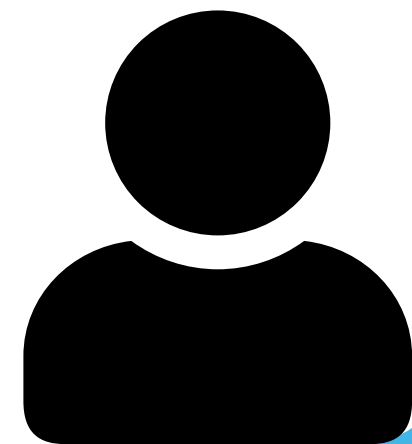


PEER
FEEDBACK

Activity Directions:

Using your priority areas from Activity 2, design scaffolds for each task phase. Draft:

1. Pre-task scaffolds
2. During-task supports
3. Post-task activities



ACTIVITY 3B

PEER FEEDBACK & DEBRIEF

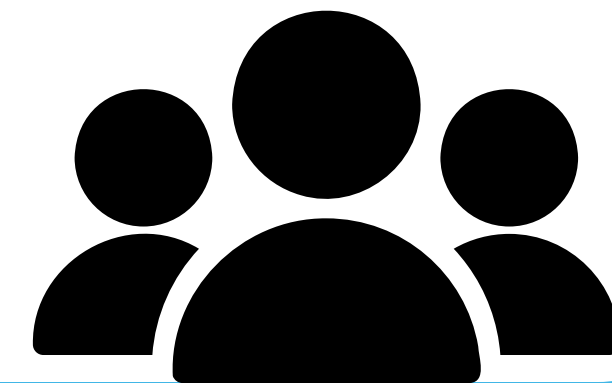


INDIVIDUAL
WORK

PEER
FEEDBACK

Activity Directions:

Share your scaffold with your partners. After each share, listening partners share positive (warm) and constructive (wonder) feedback.



KEY TAKEAWAYS

- Scaffolding is not simplifying: it's supporting independence within the ZPD.
- Effective scaffolds are calibrated, faded, adaptive, and transfer-oriented.
- Three-phase tasks (pre, during, post) provide structure for meaningful engagement.

- Backwards design helps identify where scaffolding is actually needed
- Scaffolding is an equity-promoting practice that benefits all learners — especially those who need it most

DEBRIEF AND QUESTIONS



- What are *your* key takeaways from the workshop?
- What are your next steps for implementing your scaffolding plan?
- What questions do you have?

THANK YOU!



Trischa Duke

Lead Instructional Development Specialist/
Digital Accessibility Liaison
UIC College of Business Online Programs
tduke3@uic.edu



Becky Bonarek

Lecturer, English as an Additional Language
**UIC Tutorium Intensive English and
Undergraduate Pathway Programs**
rbonar2@uic.edu

Resources



REFERENCES

- Aliakbarova, N., & Baizakova, K. (2025). *Task-based language instruction as scaffolding: a comparative study on its impact on low and high-proficiency readers' comprehension*. <https://doi.org/10.26577/JES20258439>
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.
- Bach, K. M., Reinhold, F., & Hofer, S. I. (2025). Unlocking math potential in students from lower SES backgrounds — using instructional scaffolds to improve performance. *npj Science of Learning*, 10, 66. <https://doi.org/10.1038/s41539-025-00358-7>
- Brown, H. D. (2007). *Teaching by principles: An interactive approach to language pedagogy* (3rd ed.). Pearson.
- CAST (2024). *Universal Design for Learning guidelines version 3.0*. <https://udlguidelines.cast.org>
- Ellis, R. (2009). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19(3).
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work. *Educational Psychologist*, 41(2), 75–86.
- Pea, R. D. (2004). The social and technological dimensions of scaffolding. *Journal of the Learning Sciences*, 13(3), 423–451.
- Sunaryo, Y., Waluya, S. B., Wardono, & Dewi, N. R. (2025). Evaluating the effectiveness of scaffolding techniques in enhancing students' self-awareness. *Educational Process: International Journal*, 18, e2025448.
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. *Learning and Instruction*, 4(4), 295–312.
- Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher-student interaction: A decade of research. *Educational Psychology Review*, 22(3), 271–296.
- Van Nooijen, C. C. A., et al. (2024). *A cognitive load theory approach to understanding expert scaffolding of visual problem-solving tasks*. <https://doi.org/10.1007/s10648-024-09848-3>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89–100.

