

Universal Design for Learning in Asynchronous Teacher Training Programs

An Integrated Theoretical Framework for Inclusive, Cognitively Scaffolded, and Measurable CPD

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1. BACKGROUND

- Asynchronous CPD offers flexibility, accessibility, and time independence for teachers.
- However, flexibility alone does not guarantee quality.
- When designed as a single uniform pathway, online training may reproduce barriers to participation and learning.



2. RESEARCH GAP AND AIM

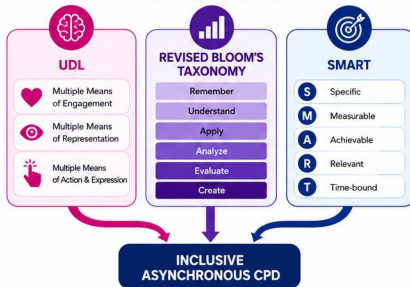
- UDL, Bloom's Taxonomy, and SMART learning outcomes have been widely discussed separately.
- Their combined use in asynchronous teacher professional development remains underexplored.
- Studies examining UDL for teachers as learners, rather than for students, are still relatively scarce.
- AIM: to propose an integrated theoretical framework for designing asynchronous CPD that is inclusive, cognitively purposeful, and measurable.



6. KEY TAKEAWAYS

- UDL functions as a meta-framework for inclusive CPD.
- Bloom provides cognitive scaffolding.
- SMART adds clarity and evaluability.

3. THE INTEGRATED MODEL



Together, the three frameworks support flexible access, cognitive progression, and measurable outcomes.



5. PEDAGOGICAL IMPLICATIONS



Design for learner variability from the outset.



Align outcomes, activities, and assessment.



Model inclusive pedagogy within CPD itself.



Support teacher autonomy and transfer to classroom practice.



Particularly relevant for remote, multilingual, or under-resourced contexts.



4. ILLUSTRATIVE MODULE EXAMPLE

Module Title: *Introduction to Universal Design for Learning*

Intended learning outcome:

By the end of the module, participating teachers will be able to evaluate the extent to which a learning activity reflects the three core principles of UDL and justify their judgement using relevant pedagogical criteria.

This corresponds to the **Evaluate** level of Bloom and is framed as a **SMART** outcome.



Representation: short video lectures, written texts, infographics, audio summaries.



Engagement: optional pathways, self-reflection prompts, examples from different educational contexts.



Action & Expression: written analysis, audio commentary, or multimedia presentation.

The module not only teaches UDL; it embodies it, allowing teachers to experience flexibility, accessibility, and choice as learners.



7. SELECTED REFERENCES

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