Hybrid and Flipped Learning Design Framework and Strategies

Conceptual Framework / Learning Framework / Procedural Framework

Design Aspects	Design Components	Design Strategies
Hybrid and Flipped Learning (HFL) Cycle <u>View Slides</u>	1. Create HFL Cycles	1.1 Define the HFL cycle length, steps, and learning tasks to clarify expectations. 1.2 Gradually increase the challenge level along the HFL cycle. 1.3 Provide regular and specific feedback throughout the HFL cycles.
Significant design work required. Examples available from previous projects.	Design Online Self-Paced Learning	2.1 Create online learning to support initial mental model development. 2.2 Apply multimedia learning principles to designing online materials. 2.3 Complement online learning with dialogue-based learning support.
	Design In-Class Active Learning	3.1 Engage students in solving whole problems with supplementary instructions. 3.2 Guide problem solving using different scaffolding types and functions. 3.3 Facilitate peer interaction during problem solving to support integration.
	Design After-Class Review and Integration	4.1 Foster learning review and new problem solving with reduced support. 4.2 Encourage after-class peer sharing and critiquing to reinforce integration.
Self-Regulated Learning (SRL) Cycle View Slides	5. Create SRL Cycles	5.1 Define iterative SRL cycles encompassing the HFL cycles. 5.2 Provide internal and external feedback support during SRL cycles.
Minimal design work required. Existing tools and resources available for adaptation.	6. Design Proactive Planning	6.1 Start each SRL cycle with goal setting. 6.2 Guide strategic planning for task, time, environment, and help-seeking.
	7. Design Performance Monitoring	7.1 Support self-control by making planned strategies easily accessible. 7.2 Facilitate self-monitoring of strategy use and learning outcomes.
	8. Design Learning Reflection	8.1 Guide self-evaluation by comparing with appropriate references. 8.2 Steer causal attributions toward controllable factors and elicit adaptive reactions.
Metacognitive Orientation View Slides	Develop Task and Strategic Knowledge	9.1 Develop task knowledge of HFL rationale, process, and expectations. 9.2 Develop strategic knowledge of approaching HFL and SRL tasks.
Some design work required while using available templates.	10. Develop Self-Knowledge and Attitudes	10.1 Guide students to reflect on their cognitive and motivational beliefs. 10.2 Develop proper attitudes through peer interactions and instructor feedback.

Reference

Shen, Y., Spencer, D., Tagsold, J. et al. (2025). Integrating cognition, self-regulation, motivation, and metacognition: A framework of post-pandemic flipped classroom design. *Educational Technology Research and Development* https://doi.org/10.1007/s11423-025-10485-y