

Supplementary Material S6: Integration of Student and Faculty Perspectives

Table S6 Integration of Student and Faculty Perspectives on Implementation Challenges and Improvement Priorities

Dimension	Student Perspective	Faculty Perspective	Integrative Interpretation
Core difficulties	Calibrating case difficulty (61.1%) Logical narrative organisation (50.0%) Difficulty integrating literature evidence (42.2%)	Process evaluation criteria unclear (50.0%) Lack of exemplars/toolkits (37.5%) Students' mindset transition difficulty (37.5%)	Difficulties stem from ZPD- appropriate complexity; need explicit rubrics, exemplars, and transition scaffolding.
Resource constraints	Time pressure (35.6%) Desire for more guidance (25.6%)	High time/energy for individualised guidance (37.5%) Insufficient practice/feedback time (25.0%) High demands on faculty skills (25.0%)	Structural (time) and pedagogical (skills, guidance) constraints coexist; require multi- level solutions.
Improvement priorities	—	Strengthen faculty support (62.5%) Enrich teaching resources (50.0%) Adjust course structure (37.5%) Clarify evaluation criteria (37.5%)	Four actionable pathways: faculty development, resource building, structural adjustment, standardised assessment.
Faculty development needs	—	Pedagogical training (62.5%) Case teaching experience (62.5%) Time investment preparation (50.0%) Team teaching (37.5%)	Role- reversal pedagogy demands triple competence: content expert, process guide, and instructional designer.