

F.O.U.R.: Translating EMI Principles into an Actionable Pedagogical Sequence for Lesson Design

Research Overview

This poster presents the F.O.U.R. model, a pedagogical sequence designed to support English-medium instruction (EMI) lesson planning. Drawing on design-based research, the model translates established EMI and CLIL principles into an actionable framework that supports teacher decision-making in multilingual and digitally mediated classrooms (McKenney & Reeves, 2012).

Purpose of Study

As EMI continues to expand globally across higher education, teachers often struggle to integrate disciplinary content and language development in ways that are pedagogically coherent, particularly when institutional support for teacher preparation is limited (Dearden, 2015; Macaro et al., 2018). While frameworks such as Content and Language Integrated Learning (CLIL) and Coyle's 4Cs model (content, communication, cognition, culture) offer strong theoretical guidance (Coyle, 2007, 2010; Coyle, Hood, & Marsh, 2010), teachers frequently report difficulty operationalizing these multidimensional principles during day-to-day lesson planning, especially in linguistically diverse classrooms with varying proficiency levels (Dalton-Puffer, 2011).

The purpose of this study is to introduce the F.O.U.R. model (Flow, Focus, Fuel, Frame) as a process-oriented heuristic that structures instructional decision-making across four interrelated pedagogical functions. Rather than prescribing fixed classroom procedures, F.O.U.R. guides teachers in aligning affective readiness, cognitive focus, interactive engagement, and reflective consolidation within a single lesson arc, preserving teacher agency while offering practical structure (Borg, 2015).

Furthermore, the F.O.U.R. model facilitates a collaborative professional space where teachers can co-create pedagogical knowledge through shared lesson design and reflexive practice.

Research Methods

This study adopts a design-based research orientation, iteratively developing the F.O.U.R. model through sustained engagement with EMI teacher training, lesson-planning workshops, and reflective instructional design cycles in higher education contexts. Data informing the model's refinement includes practitioner reflections, lesson-planning artifacts, and iterative revisions based on implementation feasibility rather than empirical outcome measurement (McKenney & Reeves, 2012).

Analytically, F.O.U.R. is systematically mapped against Coyle's 4Cs framework to demonstrate conceptual alignment while maintaining pedagogical usability (Coyle et al., 2010). The acronym is intentionally mnemonic: O.U.R. echoes Focus, Fuel, and Frame for teacher recall, prioritizing practical uptake over lexical precision.

Results and Discussion

The F.O.U.R. model articulates EMI lesson planning as a cyclical pedagogical sequence comprising four recurring functions, each supporting specific dimensions of the 4Cs:

Flow: Affective and Linguistic Warm-Up

Establishes relevance and lowers anxiety to prepare learners for target-language engagement. Supports Culture and Communication by activating prior knowledge and creating epistemic safety (Krashen, 1982; Sundqvist & Sylvén, 2016).

Focus: Cognitive and Linguistic Targeting

Clarifies core content objectives and key language features, directing attention to disciplinary concepts and communicative demands. Aligns with Content and Cognition through explicit scaffolding (Llinares, Morton, & Whittaker, 2012).

Fuel: Interactive Activation and Sustained Engagement

Powers task-based interaction, negotiation, and application to generate meaningful language use. Corresponds to Communication and Cognition via collaborative disciplinary reasoning (Dalton-Puffer, 2007).

Frame: Reflective Consolidation and Formative Visibility

Makes learning outcomes visible through reflection, evaluation, or formative feedback, reinforcing metacognition across all 4Cs (Black & Wiliam, 2009; Vollmer, 2007).

Table 1. Mapping F.O.U.R. Pedagogical Sequence to Coyle's 4Cs Framework in EMI Lesson Design

F.O.U.R. Dimension	Primary 4Cs Alignment	Pedagogical Function
Flow	Culture, Communication	Affective readiness, schema activation
Focus	Content, Cognition	Objective clarification, scaffolding
Fuel	Communication, Cognition	Task-based interaction, output generation
Frame	All (esp. Cognition)	Reflection, formative assessment

This sequencing addresses a persistent gap in EMI pedagogy: the need for manageable structures that support instructional reasoning without methodological prescription (Gierlinger, 2015).

Positioning F.O.U.R. Among Existing Pedagogical Models

F.O.U.R. complements rather than replaces established frameworks. Compared to the comprehensive 4C/ID model's four components for complex learning (van Merriënboer & Kirschner, 2018), F.O.U.R. offers a lighter-weight heuristic tailored to EMI's dual content-language demands. It aligns more closely with CLIL lesson phases (Coyle et al., 2010) and task-based language teaching (TBLT)'s pre-task, task-cycle, and post-task structure (Ellis, 2017), but emphasizes mnemonic accessibility for busy EMI practitioners.

Unlike linear models, F.O.U.R.'s cyclical design accommodates disciplinary variation and proficiency diversity, echoing calls for process-oriented EMI guidance (Gierlinger, 2015). Its

teacher-facing focus distinguishes it from curriculum-level frameworks, positioning it as a bridge between CLIL theory and classroom enactment.

Implications for EMI Teacher Education

F.O.U.R. responds to the operationalization challenge by offering a usable planning heuristic that connects theoretical principles (4Cs/CLIL) with practical sequencing. Early implementation in teacher workshops shows promise for supporting decision-making across disciplines and contexts, warranting further empirical validation (Borg, 2015). This poster invites dialogue with educators regarding contextual adaptation rather than claiming universal applicability.

Keywords: English-medium instruction, pedagogical sequencing, CLIL, 4Cs framework, teacher professional development

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