

Educational Design and the IPE Curriculum

IPE Curriculum Planning Afternoon

June 3, 2025

The IPE Curriculum's passionate purpose:

“A continuously co-created, integrated, evidence-informed, interprofessional education curriculum that prepares health and social care learners for collaborative practice and system transformation.”

Educational design in the IPE Curriculum: Building on and enhancing existing strengths

Education design approaches give us language to name what we are doing in the IPE Curriculum in terms of *why it works*, *mechanistically*, and to understand how it might be improved.

Educational design approaches are informed by evidence from research in education science and honed through experience and practice. *Education science* is the interdisciplinary study of how people learn.

Like in clinical practice, explaining the *why* behind something practical matters. Educational design approaches explain why things like interprofessional debriefs or case-based learning are so powerful and point to changes that can enhance students' learning experiences further.

Educational design approaches that the IPE Curriculum aims to integrate in the coming year:

Productive struggle

Meaningful variation

Critical dialogue

Why these educational design approaches?

These three approaches are a starting point. We are already using these approaches in the design and delivery of IPE at UofT/TAHSN, to a degree and we can continue to feasibly incorporate these education science-backed approaches into the curriculum with a simple framework of:

- What can we stop doing?
- What can we start doing?
- What can we tweak?

Importantly, the IPE curriculum already has the existing “ingredients” to support these three educational design approaches. By implementing and refining these educational design approaches, we will continue to fulfill the IPE Curriculum's passionate purpose.

Existing “ingredients” of the IPE curriculum as opportunities to introduce complementary education design ingredients:

IPE ingredient	Complementary educational design ingredient
A minimum of 50% of the activity is interactive involving discussion or activity between learners	Opportunity for productive struggle : using this interactivity to set students up to learn about key concepts by working through complex or challenging cases/scenarios together
A minimum of two distinct professions must be included	Opportunity for meaningful variation : intentionally using differing professional perspectives to set students up to notice critical features of key concepts
A formal debrief discussing development of collaborative competencies must be included	Opportunity for critical dialogue : using debriefs to set students up to question assumptions and power dynamics related to interprofessional collaborative practice
IPE activities are not assessed/graded	Supports all of the above: contributes to creating a sense of safety to struggle, openly share perspectives, and engage in critical dialogue

Productive struggle

What is it?

Productive struggle engages learners in solving problems that require concepts they have not yet learned, followed by consolidation and feedback on the targeted concept (as opposed to providing direct instruction on the targeted concept first). Productive struggle builds the conceptual knowledge needed to facilitate future learning.

Why is it a good fit for IPE?

- The IPE Curriculum includes many case-based activities, which can provide opportunities for learners to engage in productive struggle as they work collaboratively through complex, real-world scenarios, followed by consolidation and targeted feedback during debriefs.
- Productive struggle supports the development of collaborative problem-solving skills, though the problem-solving task must be clear and challenging enough to engage learners in safe exploration but not unclear or too challenging that they give up.
- Working through a challenge and coming up with their own solutions allows learners to build on their prior knowledge and experiences, equipping them with the capacity to be able to solve novel problems in the future.

What are examples of applying it in IPE?

With your table, think of different ways we are already applying, or could easily apply, this design strategy in IPE.

What might we stop? _____

What might we start? _____

What might we tweak? _____

References

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- Mylopoulos M, Steenhof N, Kaushal A, Woods NN. Twelve tips for designing curricula that support the development of adaptive expertise. *Medical Teacher*. 2018 Aug 3;40(8):850-4.
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Meaningful variation

What is it?

Meaningful variation involves exposing learners to differences in context, perspective, or approach to intentionally highlight critical features of a concept. Meaningful variation supports deeper understanding and builds transferable knowledge needed to adapt to future novel or complex situations.

Why is it a good fit for IPE?

- Inviting multiple professions' perspectives on a shared case can be a form of meaningful variation when those perspectives are intentionally used to highlight critical features of a concept.
- Providing contrasting cases (a common strategy in IPE) and asking "what if" questions (easily embedded into debriefs) can also be forms of meaningful variation when intentionally used to draw learners' attention to underlying concepts.
- Meaningful variation can help learners develop knowledge not only of different professions' role and scope, but of the significance of those differences (e.g., how and why different professions approach problems differently).

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References

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Critical dialogue

What is it?

Critical dialogue is an open-ended and exploratory approach to learning that explicitly aims to flatten hierarchies and bring together all perspectives, with the goal of noticing and questioning assumptions and power dynamics. Critical dialogue builds critical knowledge necessary for learners to enact transformative change.

Why is it a good fit for IPE?

- Critical dialogue is already occurring in the IPE Curriculum through small group conversations and debriefs that pose critical questions about power relations, professional assumptions, and systemic and structural inequities.
- Critical dialogue holds space for the complexity and uncertainty inherent in interprofessional collaboration. It resists the tendency to provide answers or tie things up in a bow.
- Engaging with different professional perspectives creates opportunities for learners to recognize their own professional assumptions and beliefs.

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References

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- Ng SL, Forsey J, Boyd VA, Friesen F, Langlois S, Ladonna K, Mylopoulos M, Steenhof N. Combining adaptive expertise and (critically) reflective practice to support the development of knowledge, skill, and society. *Advances in Health Sciences Education*. 2022 Dec;27(5):1265-81.