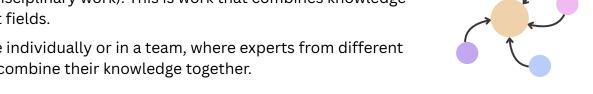
What Does it Mean to be a Knowledge Integrator?

*For more information please see the full web page.

What is Knowledge Integration?

Knowledge integration is not just the name of a university program. It is the process of combining ideas and methods from different disciplines, perspectives, and ways of knowing to create a new, more holistic understanding of a problem or topic.

- It is the foundation of inter- and transdisciplinary work (collectively called cross-disciplinary work). This is work that combines knowledge from different fields.
- It can be done individually or in a team, where experts from different backgrounds combine their knowledge together.



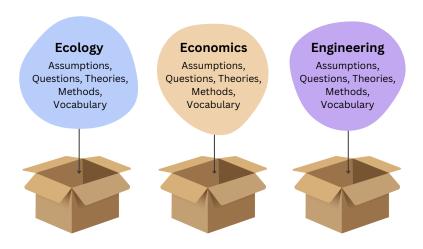
Why is Knowledge Integration Important?



Today's complex problems cannot be solved by single disciplines alone. Problems such as climate change, food insecurity, and health inequality have too many interconnected components to be tackled from just one discipline's perspective. We need to engage in knowledge integration to solve these problems. Many disciplines and stakeholders need to work together, integrating their unique perspectives to generate effective and holistic solutions.

Why Does the World Need Knowledge Integrators?

Our world likes to organize knowledge into disciplinary boxes. Each discipline has its own set of assumptions, questions, theories, vocabulary, and methods to understand, investigate, and talk about the world. This makes it very difficult for experts from specialized disciplines to communicate and collaborate with each other, especially because they are rarely taught how to do so.



Knowledge integrators are individuals who have the knowledge and skills that are needed to communicate and collaborate effectively across disciplines. They have expertise in connecting people and knowledge from diverse disciplines to solve complex problems.

What does Knowledge Integrator Expertise Look Like?

Knowledge integrators have expertise in four core areas to make knowledge integration happen. These can be summarized as "The Four Cs".



Cross-disciplinary thinking: Knowledge integrators have a breadth of knowledge across various disciplines. This allows them to find common ground and make connections between disciplines that might look very different on the surface.



Collaboration: Knowledge integration often happens in cross-disciplinary teams where collaboration is essential. Knowledge integrators have well honed abilities in creating effective team processes—the key ingredient to successful collaboration.



Communication: Knowledge integrators are skilled at communicating with individuals from different academic backgrounds. They are able to translate complex information into language that can be understood by different audiences.



Complex-Problem Solving: Knowledge integrators have training in specific problem-solving skills, techniques, and methodologies—such as design thinking. This allows them to effectively tackle complex cross-disciplinary problems.

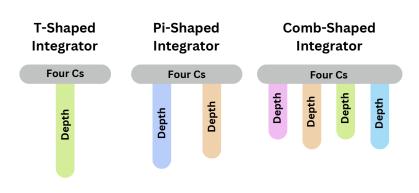
What are Knowledge Integrator Mindsets and Characteristics?

Knowledge integrators also have a set of personal mindsets and characteristics that allow them to engage in the Four Cs. These can be learned through training and experience. For example, students in the Knowledge Integration program at the University of Waterloo develop these mindsets and characteristics through the program's core courses.



What are the Different Types of Knowledge Integrators?

Beyond core knowledge integrator capabilities (the Four Cs), mindsets, and characteristics, knowledge integrators typically gain a depth of knowledge in one or more disciplines. The number of additional disciplines they specialize in determines whether they are T-Shaped (1 discipline), Pi-Shaped (2 disciplines) or Comb-Shaped (3+ disciplines).



^{*}For more information please see the full web page.