

TRANSDISCIPLINARY SCHOLARSHIP

Breaking Boundaries for a Better Future



UNIVERSITY OF
CALGARY

Our world is facing some big challenges – climate change, food insecurity, a need for safe and sustainable water systems, threats to the security of digital systems, inequity that affects health and well-being, racism, and more. These aren't simple problems with easy fixes: they're complex, messy and interconnected. To tackle them, we need more than just academic experts. We need a team effort that extends beyond the university. That's where transdisciplinarity comes in.

So, what exactly is transdisciplinarity? In short, it's a collaborative approach that invites everyone to the table, each with an equal voice. It brings together experts from different fields and people from all walks of life to address real-world problems. At the University of Calgary, it's part of *Ahead of Tomorrow (2023 – 2030)*, our strategy for the future.

To pave the way in this strategy, the university invited the Calgary Institute for the Humanities (CIH) in the Faculty of Arts to take a deep dive into transdisciplinarity to come up with a definition and to identify best practices and challenges. The team includes CIH Director, Jim Ellis (Department of English), CIH Scholar in Residence, Petra Dolata (Department of History), and UCalgary Transdisciplinary Postdoctoral Associate, Görkem Aydemir Kundakci (Department of Anthropology and Archaeology).

What the CIH team did

From April to December 2023, the CIH team embarked on an extensive journey. They scanned the landscape, scouring websites and resources of universities, institutes and organizations engaged in transdisciplinary research. They reviewed the literature, including over 120 books and articles on the subject. But they didn't stop there. They tapped into the UCalgary community, generating insights from large numbers of respondents to a survey and interview request. They shared their preliminary findings with the university community and conducted in-depth interviews with scholars, both on and off-campus, and with community partners.

When asked how important it was to them, 81% of respondents said transdisciplinary research is moderately important to very important.

What was discovered

Complex problems need creative approaches:

Transdisciplinary scholarship is all about tackling those complicated issues that don't have easy answers. It's about thinking outside the box, whether that's through critical analysis, creative problem-solving or addressing public opinion. And at its heart lies the social dimension – what sets it apart from other approaches like multidisciplinary and interdisciplinary.

Diversity is strength: Tough problems need diverse teams, bringing together experts from different disciplines – spanning the social sciences, arts and humanities; natural sciences and engineering, health and life sciences. Multiple forms of knowledge, including lived experience, practical know-how and other ways of knowing are also considered. In the process, scholars learn from one another and remain humble about their limitations. From this diversity, new disciplines and fields of study can sometimes emerge – e.g., with new experts in sustainable technologies or digital ethics and humanities.

Everyone's voice is important: Transdisciplinary scholarship also goes beyond the university, recognizing that there is valuable knowledge in the community. That means working together and co-creating with diverse communities, industry representatives and others – to understand issues from multiple perspectives and to help identify novel solutions. By embracing multiple knowledge paradigms, we enable decolonization, Indigenization, equity, diversity, inclusion and accessibility.

TRANSDISCIPLINARITY – A DEFINITION

Transdisciplinary scholarship is directed towards a complex issue or problem, most often one with a social dimension. Because of the complexity of the issue or problem, it is best addressed by teams of researchers from multiple disciplines. To address the social dimension of the question, transdisciplinary scholarship incorporates knowledges from outside the university, through theoretical or creative approaches to societal issues, and ideally by including societal actors who are implicated in the issue or problem in question.

What we learned

1. Transdisciplinary scholarship will produce both traditional forms of academic knowledge as well as **outcomes that have a direct impact on society, such as public policy, new technologies or innovative approaches to societal issues.**
2. **Transdisciplinarity can take longer** as teams combine approaches and methods across disciplines and sectors – but it's usually worth it. Tackling the most pressing problems of our day deserves the time it takes to get it right.
3. **Collaboration, communication and ethical considerations are vital** to ensure everyone is involved in identifying the problem and coming up with solutions that benefit all.
4. **It's okay to disagree – in fact, it's a good thing.** Wrestling with different values and goals and sources of data or inspiration can produce much more robust outcomes than those that try to eliminate disagreements.
5. **Transdisciplinarity strives to respect and embrace multiple forms of knowledge and incorporates Indigenous knowledge and ways of being in the world.** This approach produces research that is inclusive, equitable and accessible and fosters a more just and comprehensive approach.

What's next?

Transdisciplinary scholarship isn't just about finding answers; it's about asking the right questions and ensuring all stories are heard.

By bringing together diverse voices and perspectives, we can uncover solutions that might otherwise go unnoticed. This requires humility, trust, openness to new practices and knowledges and the courage to step outside our comfort zone.

Bridging the gap between academic knowledge, practical knowledge, and everyday experience, transdisciplinary scholarship can have a transformative impact on communities and people's lives. So, let's keep the conversation going and build a better future for everyone.

THE INSTITUTES FOR TRANSDISCIPLINARY SCHOLARSHIP

The Institutes for Transdisciplinary Scholarship at the University of Calgary provide resources and a collective approach to impact societal challenges and opportunities by facilitating collaboration, co-learning, and knowledge transformation informed by multiple perspectives.

FIND OUT MORE:

<https://research.ucalgary.ca/transdisciplinary>

CONTACT US:

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Sign-up **for our Bulletin** to learn about transdisciplinary opportunities, events, and much more!

Acknowledgment

Ellis, Jim, Petra Dolata and Gorkem Aydemir-Kundacki. *Transdisciplinary Scholarship: Final Report*. Calgary: University of Calgary, 2024.



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