



Diffractional questioning

This workshop draws on Karen Barad's theory of agential realism (2007), with the following aims:

- Foster diffractional thinking, through the formation of questions and prior questions.
- Raise students' awareness of how their own and other disciplines frame questions.
- Encourage students to work collaboratively across disciplines.
- Remind students that there are always more questions arising from questions. As Barad puts it: "*No issue is ever resolved, finally.*" (Barad and Gandorfer, 2021, p.33)

Barad calls for a diffractional methodology, which should not be a prescribed formula, but instead respond rigorously to the precise phenomenon under analysis (Barad, 2007). This workshop plan is inspired by Barad's explanation of the significance of questioning:

"The point is to open up a space for asking the prior question, and then the prior question, and then again, the prior question. In doing so I am trying to provide an ontological opening for taking into account that the questioning is part of the world and the reworlding of the world, in particular ways and not others. This matters greatly; indeed, it is an integral part of mattering otherwise." (Barad and Gandorfer, 2021, pp17-18).

By the end of this workshop, you should be able to ...

1. Use questions to engage rigorously with a specific topic.
2. Develop the skill of 'asking the prior question' to explore the assumptions that underlie existing questions.
3. Explore how different disciplines frame questions in different ways.
4. Work collaboratively to develop further questions for ongoing analysis.

Toolkit for Interdisciplinary Learning and Teaching



THE UNIVERSITY of EDINBURGH
Edinburgh Futures Institute





Lesson plan

1. Instructor / lecturer selects reading material depending on the learning context. The texts and data from the TILT section on *Working with Challenges* could be used, or other relevant interdisciplinary material which meets the learning objectives and interests of the class.
2. Working individually or in groups, students read the material and complete the first column of questions on the worksheet below. Encourage them to think critically, and make it clear that **only questions, not statements** are needed throughout. You may want to demonstrate some specific examples, depending on your learning context. Here are some generic examples:
 - What do I want to know more about?
 - What assumptions are being made here about the topic?
 - How does this text/material sit within my discipline?
 - What ethical questions arise?
 - How am I, as reader, entangled with this text? What do I bring to the reading?
 - What other texts/ideas/concepts/theories come to mind that I could read alongside (through) this one?
3. Students share their worksheets and read someone else's questions. As they read, they complete the next column of questions. Examples:
 - How are these questions framed?
 - What seems to be important to the person asking these questions?
 - What would I have asked differently here?
 - What did these questions do to my thinking?
 - What matters most here, and why?

Toolkit for Interdisciplinary Learning and Teaching





4. As class, discuss the different questions from column 2. Then, complete the final column of questions. This column is **(e)merging** in the sense that it is both giving rise to more questions and at the same time synthesizing (merging) the questions from before. There may only be a few over-arching questions at this point. You could ask:

- Which question matters most to us as a class? Why?
- Which questions would we want to re-turn (to) after today?

Variant: diffractive jigsaw: If your students already feel confident about their disciplinary identity, start them off in groups by discipline. Then regroup them into mixed groups after Step 2 so that each new group has representatives of different disciplines. In these new groups, as they complete the prior questions, encourage them to ask questions from the perspective of their different disciplines: How does their own discipline make a difference here? What further questions arise from these differences? What can different disciplines learn from each other on this topic? This strategy of re-grouping from 'expert groups' into mixed groups draws on Aronson's 'jigsaw' method (Aronson and Patnoe, 2011; for an overview of its application in HE, see Jay et al., 2021).

Toolkit for Interdisciplinary Learning and Teaching



THE UNIVERSITY of EDINBURGH
Edinburgh Futures Institute





Key readings or resources

- Bozalek, Vivienne, and Karin Murriss. "Diffraction." *A Glossary for Doing Postqualitative, New Materialist and Critical Posthumanist Research Across Disciplines*, 1st ed., Routledge, 2022, pp. 54–57, <https://doi.org/10.4324/9781003041153-28>.
- Barad, Karen. *Meeting the Universe Halfway : Quantum Physics and the Entanglement of Matter and Meaning / Karen Barad*. Duke University Press, 2007.
- Barad, Karen, and Daniela Gandorfer. "Political Desirings: Yearnings for Mattering (,) Differently." *Theory & Event*, vol. 24, no. 1, 2021, pp. 14–66, <https://doi.org/10.1353/tae.2021.0002>.
- Jay, David, Etchells, Sarah, and Dimond-Bayir, Stephanie. "Pedagogical literacies: A hidden benefit of the jigsaw technique." *Innovative Practice in Higher Education*, vol. 4, no. 2, 2021, <https://journals.staffs.ac.uk/index.php/ipihe/article/view/34>

Header image by Zhang, S. and lesson plan by Jay, D. (2024) for the Toolkit for Interdisciplinary Learning and Teaching. All content is licensed as CC BY 4.0 (Creative Commons Attribution 4.0 International). © Overend, D., Choi, S., Cross, A., Cullen, C., Dures, S., Jay, D., Scoles, J., Winter, M. and Zhang, S. (2024).

Toolkit for Interdisciplinary Learning and Teaching



THE UNIVERSITY of EDINBURGH
Edinburgh Futures Institute





Worksheet

Questioning As you read, what questions come to mind? Note them here or on your copy of the text.	Prior questioning How would you question the questions in the first column? What questions arise as you read them?	(E)merging questioning What overall questions (e)merge from your discussions? Which question matters to you most as a group? Why? Which questions would you most want to re-turn (to) after today?

Toolkit for Interdisciplinary Learning and Teaching

