Generative and Reflective Question Card Deck
Facilitation Guide

What is it?

The PI Generative and Reflective Question Card Deck is designed to facilitate individual and group reflection on principled decision-making through the lens of the eight practices of Principled Innovation. By engaging our character assets in imagining solutions that "create positive change for humanity," we are better able to navigate the uncertainty of decision-making and mitigate the unexpected consequences of our actions.

How does it support Principled Innovation?

In Principled Innovation, we work with other people—such as students, other educators , parents, colleagues, or other members of our communities and organizations—to take each other's perspectives and seek to empathetically understand them (Practice C2). We work inclusively to understand the challenges that children or adults are facing in these contexts (Practices C1 and I1) and to design creative solutions that could solve those problems.

But the final step of decision-making (Practice M2)—picking the best course of action based on the best of our knowledge and experience—is one of the hardest practices to enact, because the future is uncertain. Navigating that uncertainty takes courage, but that courage needs to be balanced with careful planning to attempt to minimize the unintended consequences from our decisions and actions (Practice P2).

The questions in this card deck are designed to help educators to engage the practices of principled innovation and move towards practical wisdom through reflection on the course of action they are about to take.

How do I use it?

Every card features two questions, one as a "starter" question (white) to begin exploring an aspect of our character and another "deeper dive" question (color) to engage practices of Principled Innovation. They are divided and color-coded into four categories of character: Moral, Civic, Intellectual, and Performance. On each card is a code that indicates which PI practice the question is exploring.

There are multiple applications for the questions and the card deck. You might first identify a challenge or decision that you or others in your community are facing. Then, select a card and use it as a basis for group discussions or journaling prompts to further explore the situation. Pick a card (or, in a group setting, have each participant pick a card), and then reflect on how the question relates to the challenges or decisions you're facing. At a later point, you can revisit the same question and see if your thinking has changed, whether as an individual or as a group.

Why does it work?

Critical reflection, whether individually or in group contexts, plays a central role in learning (Mezirow, 1990, 1998). Critical reflection facilitates meaning-making by exploring lessons learned in past experiences, a process which triggers our moral imagination (Johnson, 1993; Cook-Sather & Baker-Doyle, 2017)—our vision for how the future *could* and *should* be—and guides future action (Mezirow, 1990).

Reflective practices using tools such as journaling or questioning, support the ongoing development of PI character assets. Reflective techniques such as these have been linked to the development of a wide range of character assets in college-aged young adults, including PI assets humility, altruism (Brooks et al., 2019; Lamb et al., 2021), empathy,

fairness, perspective-taking, critical thinking, and the practices of systems-thinking (Rodríguez Aboytes & Barth, 2020; Shor et al., 2017; Van Beveren et al., 2018) and moral and ethical decision-making (Astin et al., 2006; Rockenbach, 2020).

Within teacher preparation, critical reflection has been specifically linked to the development of critical consciousness and multicultural competencies (LaBelle & Belknap, 2016; Sharma et al., 2011)—important teacher dispositions which build on the PI character assets of empathy, humility, and perspective-taking. When practiced in teams, critical reflection can lead to change within entire organizations, bringing organizational practice into alignment with institutional values (Gray, 2007; Henderson, 2002).

The reflective questions in this exercise press us to question our assumptions and enter into discourse with taken-for-granted beliefs (Mezirow, 1997), triggering the meaning-making metacognition that has been linked to personal transformation (Kolb & Kolb, 2009). They are "generative" in that they engage our moral imagination and cause us to look ahead to what the outcomes could be from a range of possible actions today. By drawing across the spectrum of PI character assets, the questions help us access the practical wisdom needed to align actions with values and mitigate the unexpected consequences of our decision-making.

References

Astin, A. W., Vogelgesang, L. J., Misa, K., Anderson, J., Denson, N., Jayakumar, U., Saenz, V., & Yamamura, E. (2006). *Understanding the effects of service-learning: A study of students and faculty*. Higher Education Research Institute, University of California, Los Angeles. https://heri.ucla.edu/PDFs/pubs/Reports/UnderstandingTheEffectsOfServiceLearning_FinalReport.pdf

Brooks, E., Brant, J., & Lamb, M. (2019). How can universities cultivate leaders of character? Insights from a leadership and character development program at the University of Oxford. *International Journal of Ethics Education*, *4*(2), 167–182. https://doi.org/10.1007/s40889-019-00075-x

Cook-Sather, A., & Baker-Doyle, K. J. (2017). Developing teachers' capacity for moral reasoning and imagination in teacher education. In D. J. Clandinin & J. Husu (Eds.), *The SAGE handbook of research on teacher education* (Vol. 2, pp. 354–368). SAGE Reference. https://doi.org/10.1002/9781118785317.weom020036

Gray, D. E. (2007). Facilitating management learning: Developing critical reflection through reflective tools. *Management Learning*, *38*(5), 495–517. https://doi.org/10.1177/1350507607083204

Henderson, G. M. (2002). Transformative learning as a condition for transformational change in organizations. *Human Resource Development Review*, *1*(2), 186–214. https://doi.org/10.1177/15384302001002004

Johnson, M. (1993). *Moral imagination: Implications of cognitive science for ethics*. University of Chicago Press. https://www.google.com/books/edition/Moral_Imagination/Df1iL-uGgdUC

Kolb, A. Y., & Kolb, D. A. (2009). The learning way: Meta-cognitive aspects of experiential learning. *Simulation & Gaming*, *40*(3), 297–327. https://doi.org/10.1177/1046878108325713

LaBelle, J. T., & Belknap, G. (2016). Reflective journaling: Fostering dispositional development in preservice teachers. *Reflective Practice*, *17*(2), 125–142. https://doi.org/10.1080/14623943.2015.1134473

Lamb, M., Brant, J., & Brooks, E. (2021). How is virtue cultivated? Seven strategies for postgraduate character development. *Journal of Character Education*, *17*(1), 1–50. https://oxfordcharacter.org/assets/images/general-uploads/Lamb-Brant-Brooks-How-is-Virtue-Cultivated-JCE-10-12-20.pdf

Mezirow, J. (1990). How critical reflection triggers transformative learning. In *Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning* (1st ed, pp. 1–20). Jossey-Bass Publishers. https://www.colorado.edu/plc/sites/default/files/attached-files/how_critical_reflection_triggers_transfo.pdf

Mezirow, J. (1997). Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, *1997*(74), 5–12. https://doi.org/10.1002/ace.7401

Mezirow, J. (1998). On critical reflection. *Adult Education Quarterly*, *48*(3), 185. https://doi.org/10.1177/074171369804800305

Rockenbach, A. N. (2020). Character education for the public good: The evolution of character capacities in and beyond college. *Journal of College and Character*, *21*(1), 6–13. https://doi.org/10.1080/2194587X.2019.1696834

Rodríguez Aboytes, J. G., & Barth, M. (2020). Transformative learning in the field of sustainability: A systematic literature review (1999-2019). *International Journal of Sustainability in Higher Education*, *21*(5), 993–1013. https://doi.org/10.1108/IJSHE-05-2019-0168

Sharma, S., Phillion, J., & Malewski, E. (2011). Examining the practice of critical reflection for developing pre-service teachers' multicultural competencies: Findings from a study abroad program in Honduras. *Issues in Teacher Education*, *20*(2), 9–22. https://eric.ed.gov/?id=EJ954551

Shor, R., Cattaneo, L., & Calton, J. (2017). Pathways of transformational service learning: Exploring the relationships between context, disorienting dilemmas, and student response. *Journal of Transformative Education*, *15*(2), 156–173. https://doi.org/10.1177/1541344616689044

Van Beveren, L., Roets, G., Buysse, A., & Rutten, K. (2018). We all reflect, but why? A systematic review of the purposes of reflection in higher education in social and behavioral sciences. *Educational Research Review*, *24*, 1–9. https://doi.org/10.1016/j.edurev.2018.01.002