THE CROWN INSTITUTE

Participatory Design Toolkit

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University of Colorado **Boulder**

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Acknowledgements

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60 MINUTES

Use Art for Multiple Interactions

Authored by Leah Peña Teeters & Susan Jurow

Activity Rationale and Aims

Aims

01.
Share perspectives through multiple modalities

02.
Develop robust understandings of key questions

Activity Summary

In this activity, collaborators will identify a focal question (see “Example from the field” for example questions) and respond to it via writing, sculpting, and talking.

Rationale

This activity helps collaborators use artistic representation as a form of expression. Engaging in artistic representation has the potential to prompt new reflections on focal questions. When developing understandings, it is important to consider multiple ways to respond to a focal question (Edwards et al., 1998). Asking questions is central to developing an understanding context, identity, and of dilemmas of practice.

Using multiple modalities (e.g. writing, drawing, oral narration) for communication is productive in developing research that can engage different kinds of collaborators and stakeholders (e.g. youth, teachers, parents). Collaborators and stakeholders may have differing preferences with regards to the modality of communication; offering a variety of opportunities to respond and/or engage with focal topics ensures accessibility and encourages deeper participation.

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In Person Steps

1. Articulate a focal question that will engage all collaborators. Consider prompts that engage emotion and can support the use of metaphor. For example:
    - "Describe/depict your role as a teacher."
    - "Depict/describe your feelings about being a care provider."
    - "Describe/draw your community."
    - "Describe/depict an object that represents your school.
2. Ask collaborators to spend time writing ideas in response to the focal question.
3. After adequate time has been provided to respond with writing, provide collaborators with colored play-doh (or modeling clay), asking them to now depict their response via 3D representation.
    - Other modalities can be used, for example, painting, collage, or drawing, instead of play-doh or colored modeling clay. Collaborators could also respond by selecting a song, or a physical stance (body sculpture).
4. After everyone has completed their artistic representation, have collaborators share what they created and what it means to them.
    - Have one person take notes of key themes discussed by each person.
5. After everyone has had a chance to share, discuss similarities and differences amongst the groups' responses. Discuss how both the similar and different interpretations strengthen the group.

Modifications and Virtual Adaptations

- Collaborators and facilitators can consider which medium works best for their context, such as drawing, painting, song, movement, collage.
- If conducting this activity in a virtual environment, a storyboard activity with Google jamboard or drawings can be used instead of play- doh, and the facilitator can create a page for each collaborator. Alternatively, the facilitator can ask collaborators to find an object in their home/area they are working from that helps respond to the question and then engage in oral explanation/discussion.

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Facilitator Preparation

MATERIALS

- Play-doh, modeling clay, or other forms of artistic representation. Note that it is recommended to provide colorful materials, to spark imagination and deepen symbolic representation
- Cardboard or paper plate to put sculpted objects on
- Writing materials including paper and pen
- Medium for note taking (a board, large sticky notes)
- Tool for taking pictures
- Audio or video recorders

Facilitation Tips

- Document what is developed, written, and orally shared via photographs and audio/video recorders.
- The set up and framing of this activity is critical. As a facilitator, it is important to do the activity before and with those participating. Facilitators want to be sure not to frame it as an add on or warm-up. Engaging in multiple forms of representation and expression is critical to generating deep understanding.
- Time spent on making and reflecting will vary between projects and will be dependent on the number of collaborators. The aim is to create a context that is unhurried and in which participants feel a sense of spaciousness and invitation to be creative and engage in deep reflection.

1. Example from the field

In a collaboration between promotoras (community health workers) and university researchers, the team used clay modeling to support the development of promotoras' professional practices. In this context, the promotoras were working with a non-profit to cultivate community and backyard gardens (see Teeters & Jurow, 2018). The focal question that led to the use of this activity was: What is involved in the work of being a promotora? This question was important because through ethnographic work in the community and with the promotoras, the research team learned that the promotoras did not think that the full extent of their work was understood and appreciated in their organization. This activity provided the promotoras with a way to explore and depict

1. Example from the field (continued)

the expansiveness of their practices.

After a written reflection on their work, the promotoras made clay representations of how they related to their work. For example, one promotora represented her work by depicting a tree sprouting two new trees. She explained that like the tree, a promotora has to first establish roots in the community. From these roots, she then spreads her work, cultivating new relationships. Another promotora depicted the physical work of putting in and tending gardens. The visual representations expanded upon the promotoras' written reflections and helped to provide a deep and collective understanding to the complexity of their practices.

This is an activity that has also been used in university courses. Instructors have used this activity to introduce and explore focal content. For example, in a learning sciences class, students were asked to depict what learning means to them via clay modeling or drawing at the start of a semester and then again at the end of the semester. Analyzing their representations from the start of the semester and then again at the end of the semester provided a way for students to reflect on their own learning.

2. Example from the field

This is an activity that has also been used in university courses. Instructors have used this activity to introduce and explore focal content. For example, in a learning sciences class, students were asked to depict what learning means to them via clay modeling or drawing at the start of a semester and then again at the end of the semester. Analyzing their representations from the start of the semester and then again at the end of the semester has provided a way for students to reflect on their own learning.

Commitments to Equity and Wellness

Engaging in imaginative and metaphorical representational practices provides collaborators with multiple modalities to explore the focal content. Artistic representation provides a mechanism for engagement and expression that does not rely only on written or oral language. This allows for collaborators to engage in activities across linguistic differences and provides access to participation for collaborators with diverse experiences with literacy and oral expression. As such, providing multiple opportunities of engagement and expression can support collaborators in feeling more comfortable, as they know they will have multiple opportunities to express themselves.

Additional Reading

Gordon, D., Meyer, & Rose, D. (2016). *Universal Design for Learning: theory and practice*. CAST Professional Publishing.

Vasudevan, L., Schultz, K., & Bateman, J. (2010). Rethinking composing in a digital age: Authoring literate identities through multimodal storytelling. *Written Communication*, 27(4), 442-468.

Works Cited

Edwards, C. P., Gandini, L., & Forman, G. E. (1998). *The hundred languages of children: The reggio emilia approach--advanced reflections* (2nd ed.). Ablex Pub. Corp.

Teeters, L. A., & Jurow, A. S. (2018). Generating equity-oriented partnerships: A framework for reflection and practice. *Journal of Community Engagement and Scholarship*, 11(1), 27-37.

2 HOURS

Funds of Identity: Artists' Books

Authored by Leah Peña Teeters, Moises Esteban-Guitart, Adriana Alvarez, & Bill Penuel

*Adapted from Esteban-Guitart et al. (2019), Zhang Yu et al. (2021).

Activity Rationale and Aims

Aims

01.
To identify the lived experiences, identities, and meaningful activities of collaborators, especially those for whom the designed product is intended

02.
To incorporate collaborators' funds of identity–the social and cultural resources central to one's self-definition–meaningfully into the design of the process and the product

Activity Summary

This activity aims to generate "identity artifacts" that can be woven into the design process so as to ensure that collaborators' diverse backgrounds are represented and sustained.

Rationale

This activity aims to support the development of culturally sustaining research and design approaches via the incorporation of collaborators' funds of identities (Esteban-Guitart et al., 2019). Funds of identity are "historically accumulated, culturally developed, and socially distributed resources that are essential for a person's self-definition, self-expression, and self-understanding" (Esteban-Guitart & Moll, 2014, p. 31). The concept of funds of identity expands upon funds of knowledge to specifically focus on the elements with which a learner self-identifies. Identifying collaborators' funds of identities in participatory research is critical to ensuring that the design process and product reflect a diversity of cultures, lived experiences, and ways of knowing. To activity presents multiple activities under the category of funds of identity to provide a variety of ways to produce "identity artifacts," which are cultural tools that can be leveraged in design (Subero et al., 2018).

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In Person Steps

1. Present collaborators with a book template including a minimum of 6 pages.
2. Present collaborators with the following prompts: “who I am?”, “what defines me?” or “the most important things in my life are….”
3. Encourage collaborators to respond to the prompts via collage, drawing, comics, painting and/or writing to tell a story of themselves, adding pages to their books as needed.
4. When all collaborators have completed their book, ask them to reflect on the funds of identity represented, using the following suggested categories (from Esteban-Guitart & Moll, 2014):
    a. *Geographical Funds of Identity*: an area such as a country, a village or feature such as a mountain, or river
    b. *Practical Funds of Identity*: activities such as work, sports, music or disciplines such as medicine or education
    c. *Cultural Funds of Identity*: artifacts such as religious symbols, national flags, national anthems or any social category such as age, ethnic group or gender
    d. *Social Funds of Identity*: significant relationships such as relatives, friends or colleagues
    e. *Institutional Funds of Identity*: institutional affiliations, such as church or school
5. After individual reflection, display all collaborators’ books and engage in a collective gallery walk, asking collaborators to notice what funds of identity they notice amongst their peers’ books.
    a. Provide collaborators with post-it notes to write down questions, compliments, comments, and reflections. These can be left by the books for authors to read and reflect upon.
6. After engaging in a gallery walk, ask collaborators to jot down some of the funds of identity that they saw represented amongst the collective.
7. Engage in a discussion about (1) the collective funds of knowledge, and (2) how these can be invited into the design process as resources.

Facilitator Preparation

IN PERSON MATERIALS

- Paper
- Artistic materials such as crayons, paints, colored pencils, magazines, scissors, glue, etc.
- Post-it notes

Facilitation Tips

- If the group is large, you may want to share the books in small groups as opposed to engaging in a gallery walk.

Modifications and Virtual Adaptations

- In lieu of having collaborators visually depict their funds of identities, they could be asked to gather artifacts in a small box over the course of multiple days and bring their boxes into a design meeting to share (see Kanagala & Rendón, 2013).
- If conducting this activity in a virtual environment, create a Jamboard page for each collaborator with multiple sections (minimum 6) instead of creating a physical book (can draw lines on the Jamboard to create sections), and then follow the rest of the activity steps, with a virtual gallery walk instead of an in-person one.

Example from the field

In a collaboration among university researchers and elementary teachers and students, collaborators designed a book making project at the start of the school year. Students wrote and illustrated short stories about themselves, their cultures, and their families. Their books responded to key questions about their identities. The teachers organized a public reading of the students' stories, allowing their fellow students and their communities to learn about them. After sharing their stories, students discussed how elements of their stories represented different parts of their identities and teachers then incorporated elements of students' identities into the design of pedagogical materials.

Commitments to Equity and Wellness

This activity has evolved in response to the need for activities that combat deficit thinking about diverse communities (Esteban-Guitart et al., 2019, p. 9). Identifying collaborators' funds of identity can support designs that sustain cultural and linguistic diversity (Esteban-Guitart et al., 2019). Funds of identity draws on funds of knowledge, but importantly, focuses on those specific cultural resources that are of consequence to the individual. Foregrounding approaches to define one's own self and one's own community is critical in developing equitable approaches to fostering pluralistic designs for learning and development (Gutiérrez & Rogoff, 2003).

This activity promotes individual and collective wellness as it invites collaborators' full humanity into design. When collaborators' identities are affirmed, valued, and sustained, the conditions are made more available for their individual and collective wellness.

Additional Reading

Esteban-Guitart, M. (2012). Towards a multimethodological approach to identification of funds of identity, small stories and master narratives. *Narrative Inquiry Journal*. 22, 173–180.

Esteban-Guitart, M. (2016). *Funds of identity. Connecting meaningful learning experiences in and out of school* (pp. 1–123). Cambridge University Press.

González, N., Moll, L.C., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities and classrooms* (pp. 1–307). Lawrence Erlbaum Associates.

Jovés, P., Siqués, C., & Esteban-Guitart, M. (2015). The incorporation of funds of knowledge and funds of identity of students and their families into educational practice: A case study from Catalonia, Spain. *Teaching and Teacher Education. 49*, 68–77.

Llopart, M. & Esteban-Guitart, M. (2018). Funds of knowledge in 21st century societies: Inclusive educational practices for under-represented students: A literature review. *Journal of Curriculum Studies. 50*, 145–161.

Moll, L.C., Amanti, D., Neff, D., & González, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Practice. 31*, 132–141.

Ordoñez, D., Siqués, C., & Esteban-Guitart, M. (2019) The best way to learn language is by not doing language: Incorporating funds of identity for learning Spanish in a shared education unit. *International Journal for Bilingual Education and Bilingualism. 23*, 155–178.

Zhang Yu, C., García-Díaz, S., García-Romero, D., & Lalueza, J. L. (2021). Funds of identity and self-exploration through artistic creation: addressing the voices of youth. *Mind, Culture, and Activity, 28*(2), 138-151.

Works Cited

Esteban-Guitart, M., Lalueza, J., Zhang-Yu, C., & Llopart, M. (2019). Sustaining students' cultures and identities: A qualitative study based on the funds of knowledge and identity approaches. *Sustainability*. 11(12), 3400.

Esteban-Guitart, M., & Moll, L. (2014). Funds of identity: A new concept based on the funds of knowledge approach. *Culture & Psychology, 20*(1), 31-48.

Gutiérrez, K., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher, 32* (5), 19-25.

Kanagala, V. & Rendón, L.I. (2013). Birthing internal images: Employing the *Cajita* Project as a contemplative activity in a college classroom. *New Directions for Teaching and Learning*, 41-51.

Subero, D., Llopart, M., Siqués, C., & Esteban-Guitart, M. (2018). The mediation of teaching and learning processes through identity artifacts: A Vygotskian perspective. *Oxford Review of Education*. 44(2), 156–170.

Zhang Yu, C., García-Díaz, S., García-Romero, D., & Lalueza, J. L. (2021). Funds of identity and self-exploration through artistic creation: addressing the voices of youth. *Mind, Culture, and Activity*, 28(2), 138-151.

Composing a Team: Considering Power and Process

3 HOURS

Authored by Bill Penuel, Leah Peña Teeters, & Susan Jurow

*Adaptation note: The protocol linked here was adapted with permission from the protocol "**Building a Local ACESSE Team to Support Equitable and Coherent Implementation in Science Education**" created by Tiffany Neill, Melissa Campanella, Bill Penuel, Deb Morrison and the ACESSE Team.

Activity Rationale and Aims

Aims

01.
To support researchers to think critically about how and who they invite to participate in a collaborative design or implementation team

02.
To think critically about how team members will work together in collaborative and equitable ways

Activity Summary

The initial team will spend time in initial reading to help develop operational ways of considering collaborators' identities and lived experiences. They will then engage with a team composition protocol. Upon engaging with the team composition protocol, they will then be encouraged to think about risks and challenges of team composition and develop suggested strategies to mitigate those risks and challenges.

Rationale

The impact of participatory design research depends greatly on who is doing the work (Teeters & Jurow, 2018). When considering who is doing the work, it is important to situate identity and expertise in cultural, historical, and interactional systems so as to mitigate the risk that identity and expertise are treated as static categories (e.g., "educator," "researcher," "Spanish-speaking," "woman"). This helps to illuminate the complexity and fluidity of power and positionality and how they play out in collaborative work (Teeters et al., 2021). This protocol is intended to help teams engage in a process of deciding what voices and perspectives are currently represented, and which ones need to be incorporated.

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In Person Steps

01.
When composing a team, it is important to consider the elements of collaborator's experiences, identities, skills, and expertises that matter for the design. In doing so, it is important to develop frameworks for thinking about collaborators' identities and backgrounds in ways that do not essentialize their identities or lived experience. As an initial step to support this, it is suggested that the individual/initial team engage in a shared reading of Gutiérrez and Rogoff's (2003) article: *Cultural Ways of Learning: Individual Traits or Repertoires of Practice*. This article provides theoretical and practical tools for mitigating the risk that identity, experiences, knowledge, and skills are seen as static, and instead suggests a framework of repertoires of practice to underscore the dynamic nature of identity and practice. Some discussion questions may be:

- What is the difference between individual traits and repertoires of practice?
- How might an emphasis on individual traits result in the generation of static notions of identity? Why is it important to avoid this?
- What are your repertoires of practice? How might they be consequential in our collaborative work?

02.
Engage with the "Composing a Team Protocol," adapting it as best fits the specific context of the focal project.

03.
Engage in reflective writing to respond to the questions:

- "What are the strengths and assets of our current team?"
- "Who is not currently included in our team?"
- "What voices and perspectives are we at risk of excluding?"

04.
If working with others, discuss your responses and then discuss and document strategies to mitigate those risks and challenges.

Modifications and Virtual Adaptations

- This process and protocol is intended to be modified to meet the specific needs of emergent projects.
- If doing this remotely, it is suggested to use break out rooms if the group is larger than 4-5 people to make sure that all voices are heard. Have small groups work to complete the protocol in break out rooms and then report back to the whole group.

Facilitator Preparation

IN PERSON MATERIALS

- *Gutiérrez and Rogoff (2003)'s article: Cultural Ways of Learning: Individual Traits or Repertoires of Practice*

HANDOUTS OR SLIDES

- Composing a Team Protocol

Facilitation Tips

- This is a process intended to be engaged at the beginning of a project and then again throughout the course of a project. The needs and realities of teams change over time; it is important to be responsive to changes and to regularly revisit this activity to consider the ways that the team composition may need to be altered.
- It is critical to consider the kind of culture that may already exist among collaborators and how open collaborators are to having their goals modified by including new team members with different aims, values, and positionalities.

Example from the field

A research-practice partnership between the Council of State Science Supervisors and university researchers at the University of Washington and the University of Colorado used the protocol to help state-level science leaders create broad teams to support equitable implementation of practices emphasized in A Framework for K-12 Science Education (NRC, 2012), which was used to develop the Next Generation Science Standards. Historically, state leaders have either not had implementation teams, or their teams were composed principally of science educators within their own networks. The purpose of this protocol was to broaden those teams to better support science teaching that would be meaningful to students of color, neurodiverse students, and emerging multilingual learners. State team leaders said using the protocol helped them attend to issues of power in science education reform and identify needs for their own growth with respect to creating broad and inclusive teams.

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Commitments to Equity and Wellness

Composing a team that will both support team members' wellness as well as create processes and products to enhance equity for communities and stakeholders relies on the thoughtful composition of the team and the design of structures and processes to ensure authentic participation and shared power. Authentic representation of the community members most impacted by focal design dilemmas supports the enactment of equity and makes possible opportunities for innovation (Fine, 2016; Gutiérrez & Jurow, 2016; Shea & Sandoval, 2020). When composing a team, it is critical to consider how the group will collaborate, how decisions will be made, and how trust will be built so as to ensure that there are structures to support equitable participation; whereas, diverse teams without structural processes oriented towards equity do not support the enactment of equity and justice.

It is important to consider the ways that the team will continue to revisit shifting structures of power and positionality, asking: "What other voices need to be present? What other structures need to be created?"

Additional Reading

Anzaldúa, G., & Keating, A. (Eds.). (2002). *This bridge we call home: radical visions for transformation*. Routledge.

Davis, A. (2013). Feminism and abolition: Theories and practices for the 21st century. Lecture. The University of Chicago, May.

Gutiérrez, K.D., Jurow, A.S., & Vakil, S. (2020). Social design-based experiments: A utopian methodology for understanding new possibilities for learning. In N.S. Nasir, C.D. Lee, R. Pea, & M. McKinney de Royston (Eds.), *Handbook of the Cultural Foundations of Learning* (pp. 330-347). Routledge.

hooks, b. (1990). Choosing the Margin as a Space of Radical Openness. *In Yearnings: Race, Gender, and Cultural Politics*, b. hooks (Ed.), 145–153. South End.

Marin, A., Stewart-Ambo, T., McDaid-Morgan, N., White Eyes, R., & Bang, M. (2020). Enacting relationships of kinship and care in educational and research settings, In A. Ali & T. McCarty, *Critical Youth Research in Education: Methodologies of Praxis and Care*. Routledge.

Works Cited

Fine, M. (2016). Participatory designs for critical literacies from under the covers. *Literacy Research: Theory, Method, and Practice*, 65(1), 47-68.

Gutiérrez, K. D., & Jurow, A. S. (2016). Social design experiments: Toward equity by design. *Journal of the Learning Sciences, 25*(4), 565–598.

Gutiérrez, K. & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher 32*(5), 19–25.

Neill, T., Campanella, M., Penuel, W., & Morrison, D. (2020). *Building a Local ACESSE Team to Support Equitable and Coherent Implementation in Science Education*.

Shea, M. V., & Sandoval, J. (2020). Using historical and political understanding to design for equity in science education. *Science Education*, 104(1), 27-49.

Teeters, L.A., & Jurow, A.S. (2018). Generating equity-oriented research partnerships: A grounded community-based research protocol. *Journal of Community Engagement and Scholarship*, 11(1), 27-37.

Teeters, L.P., Shea, M. & Jurow, A.S. (2021). Engaging the dynamics of identity, culture, and power when organizing participatory design teams. AERA Submission 2022.

Reflective Listening and Values Surfacing

45-60 MINUTES

Authored by Vanessa Roberts

*Adaptation note: This activity was adapted from the "Inspirational Reflective Listening Activity Guide" created by Project VOYCE

Activity Rationale and Aims

Aims

01.
Identify shared values and implications for collective work

02.
Establish community and build connections among team members

Activity Summary

Collaborators will take turns sharing stories about facing a personal or professional challenge or making a change in their life and listening reflectively. The Reflective Listening activity involves collaborators working in groups of four, assigning roles to themselves.

Rationale

Our lived experiences and histories impact how we show up for the work that we do and the values that guide that work. This activity is oriented around telling individual and/or collective stories and locating values within them. When we make our values explicit, we can be clear about how we individually and collectively understand and enact change.

This activity leverages the power of shared story-telling as a medium for fostering connection, self-awareness, empathy, and communication. This activity helps to illustrate what a certain value means to a person and can help avoid misunderstandings or assumptions of shared meaning, because the stories told provide concrete examples of the value(s) in action. The reflective listening skills developed will also help collaborators become more inclusive speakers.

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PROJECT VOYCE

In Person Steps

Whole Group

1. Facilitator introduces the activity, breaks large group into pairs, and has team members choose starting roles. (5 mins)
    a. See roles reference sheet (handout 1)
2. Facilitator provides the prompt: a personal or professional challenge or making a change in one's life (see modification notes for additional prompts). (2 minutes)

Dyads

3. Listeners review feeling & values list (handout 2) while Storyteller decides what story to tell and jots down key points. (3-5 mins)
4. Storyteller shares their story. (5 mins)
5. Listeners wrap up jotting their ideas down. (1-2 mins)
6. After the Storyteller has finished their story, each Listener shares what they think they heard about the facts, feelings, or values defining the story. (2 mins for each Listener)
    a. This open sharing allows the entire group to appreciate the complexity of saying what we mean and hearing what was said.
7. Repeat steps 3-6, with Listeners and Storytellers switching roles.

Small Groups of 4

8. Have each dyad join with another dyad.
9. Engage in small group dialogue, with the following prompts:
    a. When participating as a Listener, how did it feel to reflect back your impressions to the Storyteller?
    b. What was it like as the Storyteller to hear each Listener's reflection of your story (facts, feelings, and values)?
    c. What did you learn as a Storyteller or a Listener that will help you engage more fully as a member of this team?
    d. Did anything surprise you, if so, why?
10. Come back as large group for share-outs.
    a. 1-2 minutes per group.
    b. Have as many groups share as time allows.
11. Facilitator distills the commonalities and shares with team.

Facilitator Preparation

IN PERSON MATERIALS

- Paper and pen

HANDOUTS OR SLIDES

- Roles reference sheet - handout 1
- Feelings & values reference sheet - handout 2

Facilitation Tips

- The activity's comprehensive approach is best for groups committed to a longer-term collaborative effort.
- Facilitators can assign Storyteller and Listener roles or have collaborators pick roles randomly depending on the facilitator's knowledge of the group. The facilitator also floats between small groups and jots down what they hear to inform the synthesis process in step 9 above.

Modifications and Virtual Adaptations

- When working with a larger group, not every small Storyteller/Listeners group will have a chance to share out during the Large Group Debrief section. You can have them all drop reflections into a shared Google Doc to capture the feedback; Ask to hear from however many groups time allows. If carrying out the activity in person, collect a shared notes doc from each group.
- Prompts can be modified to serve the purpose of the group, some suggestions are:
  - "Tell your life story."
  - "Share your experience in school."
  - "Talk about how you ended up in your profession."
  - "What is a place that you know well and that knows you well?"
- The prompt could also be adapted to be about an institution, community, or research project, for example, "what is the history of your school?" It is important that the prompt is somewhat open-ended so that the narrator can tell the story that arises for them.
- If conducting this activity in a virtual environment, the facilitator can have each dyad share out keywords from one category (feelings, values, facts) to create a word cloud to represent the whole team's stories.

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PROJECT VOYCE

Commitments to Equity and Wellness

Wellness exists in relationships and that requires listening at multiple levels. This activity supports team members in strengthening listening skills and expanding their awareness of listening to include multiple levels: facts, emotions, values. The shared and rotating roles of listener and storyteller promote equity by ensuring that multiple voices are heard. Sharing personal stories helps to bring lived experiences forward as a form of embodied expertise. Making these experiences visible and discussing how they inform feelings, values, and ways of collaborating can mitigate traditional power structures where some forms of expertise are recognized above others and values are not made explicit.

Additional Reading

Bang, M., Faber, L., Gurneau, J., Marin, A., & Soto, C. (2016). Community-based design research: Learning across generations and strategic transformations of institutional relations toward axiological innovations, mind, culture, and activity. *Mind, Culture, & Activity, 23*(1), 28-41.

10-15 MINUTES

Build Connections

Authored by Leah Peña Teeters & Jade Gutierrez

Activity Rationale and Aims

Aims

01.
Establish community and build connections among team members

02.
Learn about the unique and shared perspectives and expertise that each team member brings to the co-design process

03.
Break down hierarchies and invite full participation of all collaborators

Activity Summary

Prior to the meeting, the facilitator will ask collaborators to contribute a short printed biography of themselves. These bios will inform discussion about values, expertise, background, and other points of connection. From the discussion, collaborators will create a visual web illustrating connections. This activity is an important step in establishing a sense of community in the early phase of co-design. It also helps the team to articulate shared and divergent values, perspectives, and expertises within the team.

Rationale

Co-design fundamentally relies on the experiences and relationships amongst collaborators (Potvin et al., 2021). Developing an efficacious research project or designed product relies on the relationships of the collaborators with each other as well as a shared understanding of each person's skills, expertise, passions, and experiences (Penuel, 2007; Ehret & Hollet, 2016; Gomez et al., 2018). It is important to invest time in relationships before tasks, so that collaborators get to know each other and understand the collective skills, expertise, passions, and experiences of the group.

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In Person Steps

In pairs:

1. Introduce yourself to your partner and share your bio.
2. Reflect on mutual connections, interests, and backgrounds.

As a whole group:

3. Post all bios on a large surface, such as a table or whiteboard or wall.
4. Invite the group to read through others' bios, and identify connections.
5. Provide collaborators with yarn and tacks, which will be used to create a line to connect one collaborator's bio to other collaborators' bios to illustrate the connections in background, expertise, and interests.
    a. Use a tack to pin the yarn in place, first at the starting bio, and then link it to another bio with identified points of connection, effectively creating a web that starts with each individual and then connects to another, and then back to that individual, and then out to another.
6. Engage in shared reflection.
    a. Examples of reflection questions include:
        i. What are similarities/differences in professional expertise, personal backgrounds, hobbies, etc.?
        ii. What did you learn from completing this activity?
        iii. What surprised you about this activity?
        iv. What did you learn about yourself and the team?

Prior to the Meeting

Facilitators will create and send out a bio questionnaire. It is recommended that teams create their own questionnaire, so as to personalize the questions to their projects. Some ideas to draw from are:

- What brings you to this project?
- Share a little bit about your professional trajectory.
- Share about your current role.
- What sustains you in your work? What sustains you outside of your work?
- What do you like to do for fun?
- What are 4 words that you would use to describe yourself?
- What are 4 activities that are important to you?

Regardless of the questions you choose, when developing a bio template, it is important to include information relevant to the shared work as well as personal information, so as to get to know each others' interests and expertises personally as well as professionally. Have all collaborators complete the template prior to the meeting and print them out.

Facilitator Preparation

IN PERSON MATERIALS

- Yarn
- Tacks or push pins
- Markers if yarn is not an option

IN-PERSON HANDOUTS

- Printed bios.

DIGITAL HANDOUTS

- Share a folder containing short bios of each team member to the team.
- Create a blank presentation slide deck that either shares each person's bio, or their name with the bio linked.

Facilitation Tips

- Prior to meeting:
  - Create a bio questionnaire and have all team members fill out the questionnaire. Either have collaborators bring a copy to the scheduled session or have them send to the facilitator, who will print them off.
- Save everyone's bios in a shared document for team members to refer to later in order to continue leveraging the connections and expertise within the group.

Specific Tips for In-Person Facilitation:

- Take photographs of the web and save to the team archive.

Specific Tips for Online Facilitation:

- If conducting this activity in a virtual environment, be intentional about pairing people for break out rooms, opting to pair those who know each other less.

Modifications and Virtual Adaptations

- This activity is intended to be tailored to meet the needs of each individual group.
- If conducting this activity in a virtual environment, store and organize all of the team members' bios in a shared folder and ensure everyone has access to the bios. Then, organize the bios (or just names that link to more comprehensive bios) on a slide deck and ask team members to use the "insert - arrow/line" function in a presentation slide deck to draw connections between their bio and their collaborators' bios.

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Example from the field

This activity was used in a collaborative research project that brought together university students and faculty. It was done towards the beginning of the project and helped collaborators in identifying the expertise of all team members. It provided a way for folks to share parts of themselves that go beyond role and title within institutions, breaking down hierarchies and inviting more full participation. It allowed collaborators to identify commonalities that wouldn't be recognized when introductions are limited to role and/or title. Some of the connections shared ended up being highly relevant to the project, such as expertise with graphic design, dance, embodied expression, and curriculum design. And other expertise was not immediately relevant to the project, such as a shared enjoyment of activities such as cycling and baking. However, these connections helped to enhance personal relationships and connections amongst the team.

Commitments to Equity and Wellness

The power and promise of co-design is bringing people from different roles and positions together to collaborate (Penuel, 2007). A critical component of ensuring the success of a team is the recognition, value, and intentional incorporation of collaborators' full selves, including both personal and professional elements. Building relationships and connections from the start of the project helps to build a foundation of relationship, recognition, and shared value for each other and though it does not ensure equitable participation, it is an important component of building a team that is attentive to equity and that can be humanizing for collaborators (Winn & Paris, 2014; 2013). Committed time to building relationships can support collaborators in breaking down hierarchies and inviting full participation.

Works Cited

Ehret, C., & Hollett, T. (2016). Affective Dimensions of Participatory Design Research in Informal Learning Environments: Placemaking, Belonging, and Correspondence. *Cognition and Instruction*, 34(3), 250–258.

Gomez, K., Kyza, E.A. & Mancevice, N. (2018). Participatory design and the Learning Sciences. In F. Fischer, C. E. Hmelo-Silver, S. R. Goldman, & P. Reimann (Eds.). (2018). *International handbook of the learning sciences* (pp. 401-409). Routledge.

Penuel, W. R., Roschelle, J., & Shechtman, N. (2007). Designing formative assessment software with teachers: An analysis of the co-design process. *Research and Practice in Technology Enhanced Learning, 2*(1), 51-74.

Potvin, A., Teeters, L. P., & Penuel, W. R. (2021). Designing for compassion in schools: A humanizing approach to co-design. In *Proceedings of the International Society of the Learning Sciences Annual Meeting*. Bodum, Germany: International Society of the Learning Sciences.

Winn, M. T., & Paris, D. (2014;2013;). In Paris D., Winn M. T.(Eds.), *Humanizing research: Decolonizing qualitative inquiry with youth and communities*. SAGE.

Design Based Implementation Research

Inventory of Participatory Design Experiences

Examples of Shared Norms

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ASPECT OF FACILITATION *ROUTINE*	EXPERIENCES (AS A PARTICIPANT OR FACILITATOR)	IN THE FUTURE, I WOULD LIKE TO...
Creating and clarifying roles Helping people understand how their contributions will be elicited and taken up.		
Structuring ideation processes that amplify voices without power Helping people understand Setting up ways to ensure equity of participation, recognizing intersections of power and culture with dominant systems.		
Building consensus Helping diverse teams come to agreement on design directions, including when there are significant disagreements and consequences of particular choices.		
Building understanding of and commitment to ideas and values Helping a new design team identify what values animate members and can serve as a basis for shared work, as well as what theories and strategies are key to the work.		
Anticipating consequences of decisions Activity of imagining possible benefits as well as harms that might result from actions taken by a team for those present and those absent.		

ASPECT OF FACILITATION *OCCASIONAL, AS NEEDED*	EXPERIENCES (AS A PARTICIPANT OR FACILITATOR)	IN THE FUTURE, I WOULD LIKE TO...
Making initial contacts Making invitations to people and organizations to participate		
Boundary spanning moves Perspective taking, perspective making, guiding the sense that people make of something		
Brokering to bring in new expertise Identifying and inviting a new member mid-design, when it's realized someone is missing		
Integrating new members Integrating a new person into the co-design process		
Facing differences Naming tensions, disagreements, repairing relationships		
Recognizing confusion over terms Naming when people are using terms in ways that are familiar to some but not others or in ways that make it difficult for everyone to enter conversations		

ONGOING

Guidelines to Support the Cultivation of Trust

Authored by Leah Peña Teeters & Susan Jurow

Activity Rationale and Aims

Aims

01.
Critically consider activities and principles that can support the development of trust.

Activity Summary

Mutual trust involves grounding research and design in authentic relationships. Building trusting relationships involves centering interpersonal relationships to accomplish shared goals and join in mutual understanding, care, and solidarity (Vakil et al., 2016). The guidelines articulated below are categorized into 6 domains: (1) develop dignity-affirming agreements (2) prioritize relationship before and through task, (3) commit to transparency in data collection, (4) ensure reciprocity, (5) take action and build solidarity, (6) identify and heal distrust. These guidelines are intended as a starting place for reflection on how teams will foster and nurture trust. They are neither comprehensive nor linear.

Rationale

Participatory research brings together people from different social positions and lived experiences. It is imperative that these collaborations are premised on trusting relationships so as to build collaborations and designs that support the wellbeing of all collaborators and generate processes that enhance the collective work. However, making visible the work of establishing and maintaining trust is difficult. These guidelines are meant to help collaborators consider dimensions of activity that can support the development of trust. These guidelines are not meant to be prescriptive, comprehensive, linear, or discrete. Developing trust is an ongoing process that is culturally, historically, and politically situated.

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GUIDELINES

1. Develop dignity affirming agreements (See Create Shared Agreements)
    a. Acknowledge and leverage all collaborators' forms of expertise, including emotional and relational expertise.
    b. Establish clear roles that invite and extend all collaborators' ways of knowing and being.
2. Prioritize relationship before and through task
    a. Make space for authentic and engaged listening (see Reflective Listening and Values Surfacing). Engage in off the record listening, where audio and video recorders are turned off and notepads are put away (see Teeters & Jurow, 2018).
    b. Establish check-ins, where time is dedicated to inquiring about and listening to the wellbeing of others, as a routine part of collaborative work.
3. Commit to transparency of data collection and analysis
    a. Take a critical view on the methodologies, theories, and literature being used.
    b. Get on-going consent for data collection- not just at the beginning of research activity.
        - If engaged in activity that is under an IRB protocol, this may mean revisiting the consent form and reminding participants of the option to withdraw at any point.
        - Share transcripts and ask collaborators if they still agree to the recordings being used.
    c. Discuss plans and processes of analysis (e.g. coding schemes and variables)
        - If collaborators are interested, code data together.
    d. When data has been analyzed, ask collaborators if the findings are presented in ways that honor their experiences and those of their community.
4. Ensure reciprocity
    a. Develop standards of collaboration where the aims are grounded in the needs, desires, dreams, and visions of all collaborators.
    b. Have explicit conversations about how collaborators envision reciprocal relationships being enacted (see Zavala et al., 2014).
        - For example, clearly define roles, articulate what each collaborator and/or entity is contributing and receiving, articulate explicit and implicit expectations, outline time commitments and constraints, develop shared and unique goals that will be accomplished.
5. Take action and build solidarity
    a. Action can take multiple forms. In some collaborations, action may consist of engaged listening and dialogue, while in others, action is indicated by policy change or the completion of concrete deliverables. It is important that all collaborators agree on the value and nature of the defined action.
    b. Start to build solidarity by making explicit commitments to equity and anti-racism (see Vakil et al., 2016). Identify the common and divergent identities and the politicized and racialized power dynamics between groups.

GUIDELINES

6. Identify and heal distrust

    a. In building trust, it is important to also identify distrust (Schultz, 2019).

        - For example, a community group may have had previous experiences with university researchers that resulted in distrust.

        - Engage in individual reflection on one's own positionality and role within the team.

    b. Work to heal distrust via honoring the dignity of collaborators (Schultz, 2019). This can happen via recognizing their funds of knowledge–knowledge based in cultural and historical practices (see Gonzalez et al., 2005)–and community cultural wealth–forms of capital nurtured by socially marginalized communities, including aspirational, navigational, social, linguistic, familial, and resistant capital (see Yosso, 2005).

Example from the field

This is an example of guideline number 6, "Identify and heal distrust." In a collaboration among high school students, university researchers, and district personnel, collaborators had the shared goal of enhancing school culture to build trust and belonging. However, to build trust, many students acknowledged that they first needed to share their experiences of distrust, so as to heal those experiences and use them in the process of envisioning and enacting schools of trust and belonging. To do so, students engaged in multimodal testimonio- the use of photography and oral and written narration to tell their stories. Stories included experiences of trust and distrust. Students identified the process of being able to openly acknowledge both experiences of distrust and trust as healing. They identified themes in their stories and used them to then envision and enact a plan for schools characterized by trust (see Trejo et al 2022).

Commitments to Equity and Wellness

Vakil et al. (2016, p. 199) discuss the role of developing trust that explicitly attends to dimensions of collaborators of identity and their histories:

> "Establishing trust with community partners, especially in communities that serve students from non-dominant groups, requires not only a personal working relationship but also a political or racial solidarity. This is particularly urgent given the historical tensions that exist between communities of color and university-based researchers (Bridges, 2001; Minkler, 2004; Sullivan et al., 2001), as well as the current climate of high-stakes testing and monitoring that is prevalent in urban school districts (Lipman, 2004). Therefore, we argue that neither trust nor solidarity is gained (nor should it be) by the assertion of good intentions, nor is it accomplished merely once and then set aside. Instead, politicized trust calls for ongoing building and cultivation of mutual trust and racial solidarity."

Drawing on the notion of a politicized trust defined by Vakil and colleagues in the above passage, we argue that the guidelines above support an explicit commitment to equity that is on-going and relational. Building trust via dignity affirming processes, attention to relationships, transparency, reciprocity, action and solidarity, and healing of distrust support collaborative processes that are not only oriented towards equity but also that have the potential to invite collaborators into spaces that support them to thrive within the context of the collaboration.

Additional Reading

Shotton, H. J., Tachine, A. R., Nelson, C. A., Minthorn, R. Z. S., & Waterman, S. J. (2018). Living our research through Indigenous scholar sisterhood practices. *Qualitative Inquiry*, 24(9), 636-645.

Tuck, E., Yang, K. W. (2014). R-words: Refusing research. In Paris, D., Winn, M. T. (Eds.), *Humanizing research: Decolonizing qualitative inquiry with youth and communities* (pp. 223-248). SAGE.

Works Cited

Bridges, D. (2001). The ethics of outsider research. *Journal of Philosophy of Education*, 35(3), 371-386.

González, N., Moll, L.C., & Amanti, C. (2005). *Funds of knowledge: Theorizing practices in households, communities and classrooms* (pp. 1–307). Lawrence Erlbaum Associates.

Lipman, P. (2004). High stakes education: Inequality, globalization, and urban school reform. *Psychology Press*.

Minkler, M. (2004). Ethical challenges for the "outside" researcher in community based participatory research. *Health Education & Behavior*, 31(6), 684-697.

Schultz, K. (2019). *Distrust and Educational Change: Overcoming Barriers to Just and Lasting Reform*. Cambridge: Harvard University Press.

Sullivan, M., Kone, A., Senturia, K. D., Chrisman, N. J., Ciske, S. J., & Krieger, J. W. (2001). Researcher and researched community perspectives: Toward bridging the gap. *Health Education & Behavior*, 28(2), 130-149.

Teeters, L., Jurow, A.S. (2018). An Ethnographic Study of Relationships de Confianza and the Organization of Collective Social Action. *Ethnography and Education*. 13(1), 84-99.

Trejo, B., Teeters, L.P., Zigarelli, J., Gleason, E., Shedro, M., & Alvarez, A. (2022, April 21-26). *Circles de confianza: Promoting the well-being of culturally and linguistically diverse youth via multimodal testimonio* [Paper presentation]. AERA Conference 2022, San Diego, CO.

Vakil, S., McKinney de Royston, M., Suad Nasir, N., & Kirshner, B. (2016). Rethinking race and power in design-based research: Reflections from the field. *Cognition and Instruction*, 34(3), 194-209.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity and Education*, 8(1), 69-91.

Zavala M. & Pérez P. A. & González A. & Díaz Villela A. (2014). Con respeto: A conceptual model for building healthy community-university partnerships alongside Mexican migrant families. *Journal of Critical Thought and Praxis*, 3(2).

30 MINUTES

Create Shared Agreements

Authored by Christine Jackson & Leah Peña Teeters

Activity Rationale and Aims

Aims

01.
To establish together a set of shared agreements to guide participation and collaboration

Rationale

Establishing shared agreements for collaborative work supports teams to come together to discuss proactively how to best work together. The group can share ideas about how to collaborate and interact with each other. If and when challenging moments arise, shared agreements that were previously negotiated can help the team to navigate their interactions in ways that honor the perspectives of all collaborators.

Activity Summary

This activity results in collective agreements with regard to how the group will engage with each other. These established group agreements will help guide collaboration throughout the duration of the project, and will be regularly revisited for revision, expansion, and use.

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In Person Steps

As a whole group:

1. Facilitator introduces the concept of shared agreements and why they are important.
    a. *Beginning with developing shared agreements creates clarity around values and expectations, and sets the stage for a collaborative environment that is grounded in respect and equity. Shared agreements also support the team to navigate challenges and disagreements.*
2. Invite the group members to reflect independently on the group agreements they would like to propose. As they generate agreements, ask them to write them down on sticky notes. Facilitators should also participate in this part of the activity with all other group members.
3. Ask each person to share out their sticky notes and put them on the board/wall. As someone reads one that is connected to another person's idea, have them go up and add their sticky note in clusters.
4. After all sticky notes have been added, review the clusters, identify key themes, and write the themes above each cluster.
5. Add these to a condensed list on a separate paper/board.
6. Review the condensed list and discuss examples of what the agreement looks like in practice.
7. Revisit agreements at the start of the next meeting so that team members can have a chance to reflect over time and then revisit the agreements.
8. Make a plan to revisit the agreements regularly (ideally in every meeting). Determine a frequency that makes sense for your group and collectively decide how you want to revisit the agreements. Some ideas on how to revisit the agreements regularly are:
    a. At the start of each meeting, have each team member read one agreement until the whole list is read.
    b. Have one person assigned to read all the agreements and have that person rotate each meeting.
    c. Ask for one team member to volunteer to read one agreement at the start of each meeting.

Modifications and Virtual Adaptations

- If adapting this activity for a virtual environment, use a shared document, Jamboard, or other collaborative technology to add and share agreements.

Facilitator Preparation

IN PERSON MATERIALS

- [ ] Powerpoint or large paper
- [ ] Sticky notes
- [ ] Butcher paper or extra large sticky notes
- [ ] Markers

HANDOUTS

- [ ] Finalized group agreements

DIGITAL HANDOUTS

- [ ] A shared document or Jamboard for the agreements and any additional group notes

Facilitation Tips

- It may be helpful for the facilitator to consider some example agreements prior to the meeting, such as:
  - Encourage multilingualism
  - Make space for everyone to participate
  - Be present and minimize distractions
- The facilitator and group members should practice validating, encouraging, admiring, and appreciating what each person brings to the group.
- Allow adequate time for people to reflect on the group agreements before asking for modifications, additions, or changes.
- Make sure every person has the opportunity to speak and to be heard. It is especially important to model this in the first meeting for all future meetings.
- It is necessary to reach consensus on the group agreements. All dissenting opinions should be heard, considered, validated, and worked through collectively. This activity can be extended for as much time as needed to reach consensus.
- At the beginning of each meeting moving forward, include a link or visual posting to the group agreements in the meeting agenda so they can be read, revised, or expanded upon as needed.
- It may be helpful to implement this activity alongside a consideration of the guidelines outlined in the tool "Guidelines to Support the Cultivation of Trust."

Example from the field

In an on-going collaboration between researchers, practitioners, and students, the group developed shared agreements at the start of the collaboration. These agreements were returned to at the start of regular meetings and revised and expanded as the collaboration progressed. One of the shared agreements was "lean-in, lean-out." This agreement encouraged all collaborators to share the air and speak up when they were being less vocal (lean-in) and make space for others (lean-out) when they noticed that they were being more vocal.

In the context of a multi-day design intensive, one collaborator was very vocal and engaged in the conversation and direction of design. While the collaborator's enthusiasm was appreciated, it prevented other members from sharing their views and opinions. The facilitator noticed this pattern emerging in the meeting and invited the group to pause after a break to review the agreements. They read them all, and paused to discuss "lean in/lean out" in a bit more depth. This break served the purpose of re-centering the group around their shared agreements, after which the student was more intentional about pausing to speak until others had also contributed. This example illustrates how returning to shared agreements in the moment and in the midst of the work can be a powerful way to keep the values centered and the work on track.

Commitments to Equity and Wellness

Creating and revisiting shared agreements allows us to hold ourselves accountable and proactively seek to establish shared processes and commitments of collaboration. Generating shared agreements can help teams mitigate challenging situations, as well as to navigate them if and when they arise. Adhering to and revisiting shared agreements brings forward group's intentions and keeps work person-centered.

Additional Reading

Postmes, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology, 80*(6), 918–930.

120 MINUTES

Guidelines to Building Asset-based Linguistic Practices

Authored by Leah Peña Teeters

Activity Rationale and Aims

Aims

01.
To develop asset-based linguistic practices

02.
To develop practices of multilingual communication that honor multiple cultures and epistemologies

Activity Summary

These guidelines are meant to be a reflective starting place for multilingual collaborations. In multilingual collaborations, there is a risk of privileging one language, and thus culture and epistemology, above others. This can happen in the context of "unidirectional" translation, which is characterized by one-way translations that present information through the dominant worldview (Mignolo & Schiwy, 2003). To develop linguistic practices that honor multiple languages, cultures, and epistemologies, it is important to consider practices that are fluid, collective, and multimodal.

Rationale

Linguistic diversity is a significant asset to collaborative research projects; with intentional planning, multiple languages can enhance the design and depth of a project. Language embodies both the meanings of words as well as epistemologies and cultures. Intentional inclusion of diverse languages can support a design that makes space for multiple ways of knowing and being. To ensure equitable collaborations and authentic understandings, there is a need for strategies that ensure the integrity of practices of interpretation (spoken language) and translation (written language), attending to both the meaning of the words as well as the cultural origins.

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GUIDELINES

1. **Utilize syncretic approaches** to translation and interpretation that are multidirectional and honor the understandings of multiple speakers (Mignolo & Schiwy, 2003). Syncretic approaches involve combining multiple perspectives and processes. Two approaches to enact syncretic translation/interpretation are two-way and co-created translation/interpretation.

    a. **Two-way** (or double) translation/interpretation is where the original passage or statement is translated into the second language, and then the translation is translated back into the original language to verify accuracy, meaning, and understanding (see example from the field, below). In the below example, the interpreter first clarifies the meaning of the original phrase. Then provides an interpretation, adding an example. The interpreter then restates what she said, using the first language. This approach privileges comprehension above literal interpretation..

    b. **Co-created** translation/interpretation is an approach to syncretic practices that is less linear than two-way translation/interpretation. It involves multiple speakers collectively developing meaning based on the specific context (see example from the field, below). In the example below, a bilingual group works together to clarify the meaning of one word that can mean different things, depending on the context. All 5 collaborators work together, using two languages, to verify the meaning of the word that reflects the context and intent of the speaker.

2. **Integrate multimodal expressions** (see Use Art for Multiple Interpretations), such as artistic representations, digital representation, and diagramming can enhance multilingual projects by expanding repertoires of communication (see example from the field, below). In the example, below, collaborators use writing, visual depiction, and oral discussion to develop shared meanings. Multimodal expression can encourage collaborators to think deeply and critically about problems of practice, values, and imagined futures than could be done via words alone (Conrad & Kendal, 2009; Vasudevan et al., 2010).

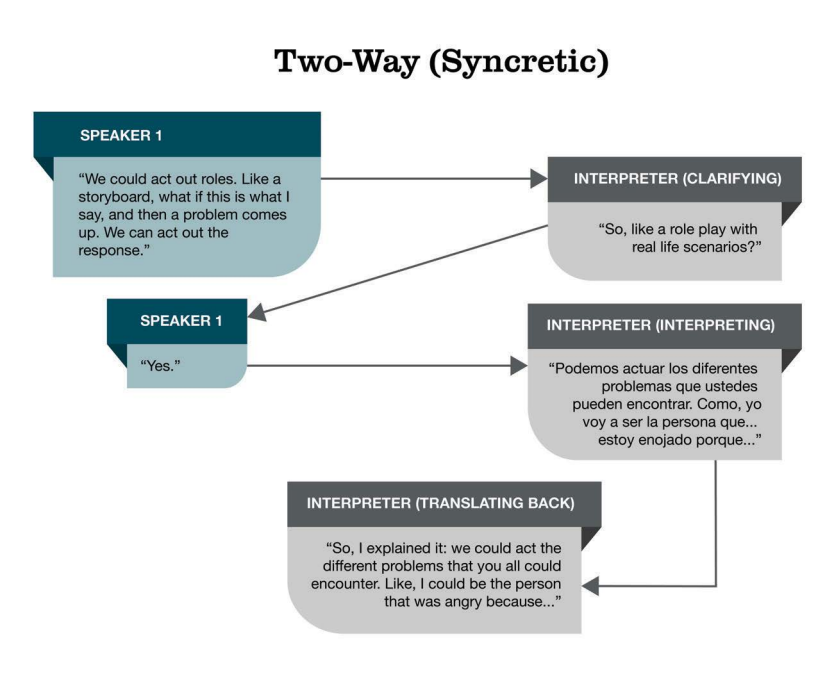
Example from the field 1 / 3

These are examples taken from a collaborative project between university researchers and community activists. The community activists consisted of Spanish speaking and bilingual (Spanish-English) collaborators. The university researchers consisted of English speaking and bilingual (English-Spanish) collaborators.

Syncretic Translation

Two-way translation

In this exchange, speaker one, represented in blue, expressed an idea in English, the interpreter, represented in green, then confirmed their understanding of speaker one's idea. The interpreter then interpreted the idea in Spanish, elaborating with an example. To then ensure accuracy, the interpreter shared her interpretation back to speak one in English. In this example, understanding is privileged above literal interpretation as there is a shared context for collaboration.



Example from the field 2 / 3

Co-created translation

The transcript below highlights a conversation in which a person on a team of 5 people was seeking clarification on the definition of a specific Spanish word (*hierba*) that has different meanings depending on the context. In this exchange, all collaborators speak some English and some Spanish; not all collaborators have proficiency in both languages. Speaker 1 makes a statement, and speaker 2 asks for clarification on the word *hierbas*. Speaker 3 and Speaker 4 interpret the word as "herbs." Speaker 2 then interprets the original sentence, checking for understanding. The original speaker confirms the first part of the sentence, then through non-verbal communication, elicits the support of speaker 5, who then clarifies that in this context, *hierbas* means weeds, confirming with the original speaker.

Speaker 1: Necesito ayuda para identificar las hierbas.
Speaker 2: What is that last word?
Speaker 3: herbs
Speaker 4: herbs
Speaker 2: Identify… Is it to identify the herbs?
Speaker 1: Yeah, it is to identify… (looks to speaker 5)
Speaker 5: In this context, they are referring to weeds. Hierbas also means herbs, but I think they are referring to weeds. [To Speaker 1]: las hierbas, como las plantas que no quieres crecer, si?
Speaker 1: Si, a identificar las hierbas, las plantas que no quiero cultivar.

Example from the field 3 / 3

Multimodal

The image below was taken during a series of activities conducted amongst university researchers and community activists aimed at articulating the community based work. The activities included role-play and teatro (see Boal, 1997), writing and narration, and artistic representations of community activity via drawing and clay modeling (see Teeters & Jurow, 2018). These diverse activities allowed collaborators to move beyond linguistic representation to communicate complex ideas.

Commitments to Equity and Wellness

Collaborations that bring together people with different linguistic practices are rich with opportunities for pluralistic design, where the process and product makes space for multiple ways of knowing and being. While practices of interpretation and translation often facilitate the process of communication, it is important to consider the ways that translation and interpretation are laden with power dynamics (Lui, 1999; Niranjana, 1992). Unidirectional translations, where one language is translated into another, without any checks for understanding or accuracy, can present the risk of misinterpretations and distortions of meaning. This situation can often result in the dominance of one epistemology at the expense of another (Mignolo & Schiwy, 2003; Mutua & Swadener, 2004). Syncretic and multimodal practices of interpretation and translation make space for shared understandings. When collaborators feel seen, valued, and understood, their wellbeing is supported in collaborative spaces. Close attention to how language is shared and used as an asset can support the affirmation of and care for all collaborators.

Additional Reading

Bassnet, S. (2011). *Reflections on translation*. Multilingual Matters.

Behar, R. (1993). Translated woman: *Crossing the border with Esperanza's story*. Beacon Press.

Bell, R. (1991). T*ranslation and translating: theory and practice*. Longman.

Ngugi wa Thiong'o. (1985). *The language of African literature. In Translating Cultures: Perspectives on Translation and Anthropology* (pp. 159-160). P. Rubel & A. Rosman (Ed.). Oxford, OX: Berg.

Teeters, L. A., & Jurow, A. S. (2018). Generating equity-oriented partnerships: A framework for reflection and practice. *Journal of Community Engagement and Scholarship*, 11(1), 27-37.

Venuti, L. (2000). *Translation studies reader.* Routledge.

Vygotsky, L.S. (1986) *Language and thought*. MIT Press (originally published in 1936).

Yengoyan, A. (2003). Lyotars and Wittgenstein and the question of translation. In *Translating cultures: Perspectives on translation and anthropology*. P. Rubel & A. Rosman (Ed.). Oxford, OX: Berg.

Works Cited

Conrad, D., & Kendal, W. (2009). Making space for youth: iHuman youth society and arts based participatory research with street-involved youth in Canada. In D. Kapoor and S. Jordan (Eds.), *Education, participatory action research, and social change: International perspectives* (pp. 251–264). Palgrave Macmillan.

Liu, L. (1999). Tokens of exchange: The problem of translation in global circulations. Duke University Press.

Mignolo, W., & Schiwy, F. (2003). Double translation: Transculturation and the colonial difference, In T. Maranhao and B. Streck (Eds.), *Translation and ethnography: The anthropological challenge of intercultural understanding* (pp., 3–30). University of Arizona Press.

Mutua, K., & Swadener, B. B. (Eds.). (2004). *Decolonizing research in cross-cultural contexts*. State University of New York Press.

Niranjana, T. (1992). Siting translation: History, post-structuralism, and the colonial context. University of California Press.

Vasudevan L, Schultz K, Bateman J. (2010). Rethinking Composing in a Digital Age: Authoring Literate Identities Through Multimodal Storytelling. *Written Communication*, 27(4), 442-468.

60 MINUTES

Establish Roles: Superpower Activity

Authored by Vanessa Roberts & Susan Jurow

*Adaptation note: This activity was adapted from the Project VOYCE Youth Facilitation Team.

Activity Rationale and Aims

Aims

01.
To identify the individual and collective strengths of the team

02.
To introduce a sense of play and create a space for robust engagement

Activity Summary

Collaborators design a superhero that allows them to identify needed strengths and challenges to address collective problems. The activity involves imagining, drawing (or otherwise representing), and introducing their superhero to the group. The activity concludes with a gallery-walk and a debrief.

Rationale

Developing shared understandings of individual and collective strengths is critical to establishing roles in the context of collaborative work. This activity supports collaborators in recognizing their own strengths and those of their collaborators. Identifying the strengths of the team supports the establishment of roles that are appropriately aligned with collaborators' skills and expertises.

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PROJECT VOYCE

In Person Steps

As a whole group:

1. Introduce the activity by asking what collaborators know about superheroes
    a. What are some examples of superheroes?
    b. How are they a part of popular culture?
    c. What is the history of superheroes?
    d. What or who is often the villain? How is the construct of a villain important to the construct of a superhero?
2. Set the stage for the activity by providing the context that this group is a newly formed league of superheroes coming together to solve_____ (*insert big research question if already identified, if not, more generic reason why the team exists*). "But as we are so new, we need to figure out what our unique and combined powers are so that we are best equipped to tackle our 'villain'."
    a. Ask: What is the context where our superheroes will do their work? What might the villain be? How do we relate to it

Individually:

3. Prompt collaborators to reflect on their own skills, unique attributes, expertises, and gifts that they are bringing to the team and the collective work. Ask them to visually represent themselves as a superhero, illustrating their unique contributions. Invite them to draw themselves, or engage in other forms of visual representation, such as adding symbols, descriptive words, metaphorical colors.

As a whole group:

4. Affix the finished drawings around the space to create an impromptu art gallery.
5. Have the group stand up and engage in a gallery walk, where the team moves together from illustration to illustration. Have the author of each superhero give a short introduction and explanation of their depiction.
    a. Encourage questions and feedback from the group.
6. Engage in a collective discussion to debrief the activity. Start the discussion by soliciting general reflections and then move into more specific questions about the team:
    a. What stood out to you overall? Did you notice any themes or similarities? Conversely, any stark contrasts?
    b. Thinking now about working together on our real-world problem, what is possible with our powers combined? Are there certain conditions that will allow our powers to fully activate?
    c. How do we ensure that everyone's powers are celebrated and utilized? What do we need to watch out for to make sure we do not negate one another's power? How do we support each other's power and create a collective power?
    d. What external forces (like kryptonite) might weaken one's power and the collective work? How can we look out for that?
7. Wrap Up: Facilitator synthesizes the comments from the group coupled with their own observations and makes some connections to the larger project/research question. This wrap up is meant to serve as a way to explicitly connect the activity to the reason(s) the group has come together and the work they are set to do.

Modifications and Virtual Adaptations

- If conducting this activity in a virtual environment, consider using breakout groups to share the superheroes. They can then be placed in a shared slide deck for all to see. Collaborators could either create the superhero digitally or take pictures of their drawings and upload them to a shared drive so everyone can see them.

Facilitator Preparation

MATERIALS

- Paper
- Creative materials (pencils, paints, feathers, glitter, markers, wire, yarn, etc.)
- Masking tape or pushpins

Facilitation Tips

- Modeling is a key piece of this activity -- how might you model vulnerability and being creative (without fear of perfection)?
- Collaborators may need support to be creative when engaging with this artistic and imaginative activity. Consider playing music to help set the mood.
- Questions a facilitator might ask to get detailed superheroes include:
  - Their superhero's origin story - where did your super powers come from?
  - What are your superhero's super powers?
  - Do they have a theme song? Symbol? Crew?
  - What is their hero's weakness (e.g., Superman's kryptonite)? What are the constraints and obstacles?
  - Who is your villain?
  - What objects would a superhero in your community need in their toolbelt?
  - What image would a hero present?
  - Does your hero stand out in a crowd with bright colors, or does your hero look like someone in your school, your neighborhood, or your religious community? Or both?
- The facilitator should think about diverse examples of superheroes in advance, to help facilitate the conversation.
  - Marvel's Muslim Superhero
  - Eve L. Ewing and Evan Narcisse

Example from the field

During the first orientation meeting of a community based research project composed of a mixed group of undergraduate and graduate students and faculty, this activity was selected as a means of both facilitating increased relationship building among team members and as a way to assess individual contributions to the team. The facilitator additionally selected this activity as a way of disrupting traditional higher education power dynamics via the introduction of imaginative and playful elements that draw out and encourage humanizing connections.

The activity began with an open-ended question asking participants to share who their favorite superhero is and why, eliciting smiles from most as they recalled childhood introductions to popular characters. After a brief discussion of the key traits of the examples offered by the group, the facilitator guided the group to the next part of the activity with a re-frame to focus on the shared purpose that brought them together. The team engaged in shared discussion before starting to work on their own superheroes. As the team started depicting themselves as superheroes, though the work was individual, the room was full of laughter and conversation. The very process of engaging in this creative activity broke down barriers and hierarchies and welcomed connections.

When the team turned to the gallery walk, there was lots of energy and excitement and some nerves (no matter the person's age or title!). As the sharing commenced, it was clear to see team members' pride in sharing their own strengths and engaging with questions from the team. After the gallery walk, when the team sat back down to engage in a discussion, the energy and dynamics of this newly formed group were notably different than at the start of the time together. Collaborators engaged in more talking to one another, as opposed to at or over one another. Collaborators shared more personal details about themselves and engaged in authentic listening to each other. Throughout the community based research project, this activity was referenced numerous times informally credited as a key part of the "glue" that made the group work so well together.

Commitments to Equity and Wellness

Engaging in imaginative and metaphorical representational practices provides collaborators with multiple modalities to explore the focal content. Artistic representation provides a mechanism for engagement and expression that does not rely only on written or oral language and can invite collaborators more fully into the shared space.

This activity is premised on the commitment to relationship before task. It seeks to recognize and build connections amongst collaborators. Building relationships and connections from the start of the project helps to build a foundation of relationship, recognition, and shared value for each other and though it does not ensure equitable participation, it is an important component of building a team that is attentive to equity. This allows for collaborators to engage in activities across differences and provides access to participation for collaborators with diverse experiences and builds a foundation of connection that can help teams navigate challenging conversations with care.

Additional Reading

All Parliamentary Group on Arts, H. & W. (2017). The Arts for Health and Wellbeing: Inquiry Report. United Kingdom.

Jurow, A., & Creighton McFadden, L. (2011). Disciplined improvisation to extend young children's scientific thinking. In Sawyer, K. (Ed.), *Structure and improvisation in creative teaching* (pp. 236-251). Cambridge University Press.

Vasudevan, L., Schultz, K., & Bateman, J. (2010). Rethinking composing in a digital age: Authoring literate identities through multimodal storytelling. *Written Communication*, 27(4), 442-468.

60 MINUTES

Circles of My Multicultural Self/Who are You, Really?

Authored by Vanessa Roberts, Bill Penuel, & Christine Jackson

This activity was adapted from Project VOYCE and was originally sourced from an activity by Critical Multicultural Pavilion (Facilitation guide)

Activity Rationale and Aims

Aims

1. Explore the self through critical reflection on identity and stereotypes
2. Disrupt the myth of neutrality in team building and partnership development

Rationale

This activity provides an arena for self-reflection on how our positionality impacts our role on a team and when interacting with others. It can be used during team building and partnership development and supports the aim of disrupting the myth of neutrality by using storytelling for social change. It creates a space to think more deeply about how identities impact partnership.

Activity Summary

Collaborators will have an opportunity to engage in tiered reflection, shifting from the individual level, to interpersonal, to a broader/societal lens. After identifying the key components comprising their sense of self, prompts then invite consideration of stereotypes and the consequences of not interrogating biases that go unchallenged.

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In Person Steps

01.

Begin with an introduction to the concept of "positionality":

- We all can recognize that we are ones who need to change and be part of the change we seek in the world. It is critically important to think about how our positionality impacts our interactions with other people.
- Before I define positionality for everyone, is there anyone here who has heard or knows what it is.
  i. Positionality is a term used to describe how people are defined, that is "not in terms of fixed identities, but by their location within shifting networks of relationships, which can be analyzed and changed" (Maher & Tetreault, 1994, p.164).
  ii. Positionality is the social and political context that shapes your identity in terms of how your different categories, like race, class, gender, sexuality, and ability status, intersect to create the unique nexus that is *you*. Positionality also describes how your identity influences and biases your understanding of and outlook on the world.
- Pause and check for understanding:
  i. Can you please say 1-2 things that come up for you when you think about positionality?
  ii. How can the concept of positionality help us better understand how oppression came to be incorporated into the foundations of our social institutions?

02.

Introduce the activity: "Taking the time to reflect on the following questions and how they impact the ways we receive and engage with other people."

03.

First set of INSTRUCTIONS (see slide 4)

- Place your name in the center circle.
- Write an important aspect of your identity in each of the surrounding circles. The circles that are closest to the core represent the aspects that are most central to your identity.
  i. Ask collaborators to identify the most important dimensions of who they are (identity) that support their well-being, sharing possible categories of identity with them (funds of identity categories: geographic, practical, cultural, social, institutional).
- Think about a story associated with one of the identity aspects you listed in which you were:
  i. Proud to be identified by that label/placed in that category.
  ii. Uncomfortable/pained to be identified by that label/placed in that category.
- You will now have just about 3 minutes to fill out your own set of circles. Please let us know if you have any questions.

In Person Steps

04.

Think/Pair/Share Instructions (slide 5)

- Format for Partner Pair & Share
  - i. Each person will have 2-3 minutes to share their stories.
  - ii. Person A will go, followed immediately by Person B (do not comment or respond, yet!).
  - iii. Person B will share their story *without* framing it as a response to what they just heard.
  - vi. Partners will then have 4 minutes to discuss their stories.

05.

Come back together as a large group:

- **COLLECTIVE BREATH MOMENT!** Have the team listen to and participate together in the 3-Minute Breathing Space practice .
- Debrief the pair shares using the following questions:
  - i. What were some commonalities and differences between your stories?
  - ii. Between stories of being proud and in pain?
  - iii. What was it like to be the speaker? The listener?

06.

Final portion instructions:

- Ask collaborators to take another look at their circles and reflect on the question,
  - i. What stereotypes are associated with the different identifiers you listed about yourself? Remind them that, “While all stereotypes are generalizations, not all generalizations are stereotypes. Stereotypes are widely circulated oversimplifications of a group of people, while generalizations can be based more on personal experience, not a widely-accepted factor” (Nittle, 2020). Take a moment to jot down 1-2 stereotypes that may be applied to your identity characteristics.
- Drawing connections
  - i. It is important to consider how our perception of how others perceive us can impact our sense of self and our personal narrative. To wrap up this activity, it is time to reclaim the narrative and flip the script!
- Please take 2 minutes to reflect on the stereotypes you have personally experienced about one dimension of your identity that fails to describe you accurately, and complete the sentence, “I am a/an X, but I am NOT X.”

  *Note, this is about sharing what stereotypes you have personally experienced, rather than what stereotypes you are aware of (to avoid listing stereotypes related to different identities).

07.

Group Debrief

- Invite collaborators to share their “flip the script” sentence.
- Ask “What is coming up for you in this moment - any ‘ah-ha’ moment(s) you wish to share?”

Facilitator Preparation

IN PERSON MATERIALS

- N/A

HANDOUTS OR SLIDES

- Example slides

Facilitation Tips

- Facilitator(s) should model their own circle briefly while collaborators populate their own.
- Facilitators should reflect on how they will model engagement prior to facilitation.
- It is most effective if facilitators also engage as active collaborators. When facilitators engage vulnerably and authentically, collaborators are more likely to feel open to do the same.
- It is crucial to invite silence and reflection.
- Encourage the acceptance of multiple truths and the use of “I statements”.
- Encourage collaborators to practice validating, encouraging, admiring, and appreciating what your partner shared.
- Practice stopping to take a deep breath and re-center.
- SET TIMER: 2 + 2 + 4 = 8 minutes in partner pair breakouts.
- If possible, give reminders to switch at 2 minute and 4 minute mark.

Modifications and Virtual Adaptations:

- Extension focused on diving deeper into stereotypes (30 minutes):
  i. Debrief Questions (could be presented as an individual writing activity or group discussion):
    - How much of affirming what we are involves saying what we are not to others, to deflect stereotypes?
    - How do the dimensions of your identity that you chose as important differ from the dimensions other people use to make judgments about you?
    - Did anybody hear somebody challenge a stereotype that you once bought into? If so, what?
    - Where do stereotypes come from? How are they connected to the kinds of socialization that make us complicit with oppressive conditions?
    - How can we cultivate groups and communities where we cultivate more moments where we feel proud of our identities?

Example from the field

This activity has been done in a wide variety of contexts, with varying ages, professional roles and experiences, and identity statuses. One example of how it has been used is when introducing graduate students to research and supporting them to explore their positionality and how it is made to be consequential depending on the social, relational, temporal, and political contexts. In this context, students considered what elements of their positionality may matter more or less, depending on the context of collaboration and research. They reflected on how their positionality could generate bias and unique perspectives in relation to a variety of projects. Students reflected that this was a particularly powerful activity to engage in at the start of a research project as it helped them be aware of how they were entering into partnership.

Commitments to Equity

A key condition for equity is recognizing our own positionality, how it shapes who we are, the power we can exercise in different contexts, and how others see us. Positionality is a resource for collaboration in many respects: as a source of knowledge about experiences that are relevant in design, for example, and as a basis for securing resources needed to carry out work.

Our positionalities also include our funds of identity and can be a resource for our own well-being (Esteban-Guitart & Moll, 2014). People bring ways of caring for others and themselves that are specific to the families and communities they are part of. Eliciting how people attend to and take care of one another's well-being is part of this activity.

Additional Reading

Esteban-Guitart, M., Lalueza, J. L., Zhang-Yu, C., & Llopart, M. (2019). Sustaining students' cultures and identities. A qualitative study based on the funds of knowledge and identity approaches. *Sustainability*, 11(12), 3400.

Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher*, 32(5), 19-25.

Louis, K. S., & Barton, A. C. (2002, September). Tales from the science education crypt: A critical reflection of positionality, subjectivity, and reflexivity in research. *Forum Qualitative Social Research/Sozialforschung*, 3(3).

Nittle, N. K. (2020, February 4). What Is a Stereotype? ThoughtCo. https://www.thoughtco.com/what-is-the-meaning-of-stereotype-2834956

Works Cited

Esteban-Guitart, M., & Moll, L. C. (2014). Funds of identity: A new concept based on the funds of knowledge approach. *Culture & Psychology*, 20(1), 31-48.

Maher, F. A., & Tetreault, M. K. T. (2001). *The feminist classroom: Dynamics of gender, race, and privilege* (Expand ed.). Rowman & Littlefield.

2-3 HOURS

Team Composition Protocol

Team Composition Protocol

*Adapted from a Local ACESSE Team to Support Equitable and Coherent Implementation in Science Education By Tiffany Neill,Melissa Campanella, Bill Penuel, Deb Morrison and the ACESSE Team

Protocol

STEP 01.

Identify key people who might be potentially impacted by the focal research and/or design project.

People who may be impacted, that is, key stakeholders, need representation and power on the collaborative team. Try to think beyond immediate stakeholders. For example, in education, stakeholders are often thought of as students, teachers, and families. We encourage you to consider the people who will be immediately impacted as well as more distal stakeholders, such as families, district leaders, community organizations, local school boards, libraries, etc. If there are natural categories arising in your list, group the stakeholders accordingly:

STEP 02.

Map the relative power of each of your stakeholder groups to set terms of discussion about what is important with regards to the focal design project.

It is important for equity to begin with a recognition that people do not arrive at a team with the same amount of power. Power includes the ability to allocate or divert resources to support a particular initiative or program that comes from one's position. But power also relates to people's social identity, such as their race. One way to think about power in the context of educational transformation is that it involves both having a say, and more than that, having a seat at the table and *to set the terms of debate*, that is, what the conversation is about.

Map the stakeholders you listed in the previous step onto the grid on the following page, then return to the reflective questions below.

- Of the stakeholders you identified, which currently have the most and least say as to the terms of debate or conversation with regards to the foci of design?

- For each group with least say the above, identify at least 1-2 people who are leaders you might bring into a team, and take note of types of groups where you don't know anyone. Who might you know that could help you connect to this group?

- For groups with the most say, identify at least 1-2 people who are leaders who must be at the table for any change effort to be effective, because of the power they hold. Who would be a good participant on a team, who is also a good listener who makes room for multiple voices to be heard?

MORE SAY

MORE AT STAKE

LESS AT STAKE

LESS SAY

STEP 03.

Identify relevant lived experiences that are critical to be reflected and incorporated into the design.

Lived experiences may include categories such as geographic experience, experience as a part of a religious, linguistic, or ethnic group, experience in a profession, experience in a discipline, or experience as a parent, for example. As a group consider both the categories and the domains within those categories that may be relevant for the focal design project.

PROFESSIONAL EXPERIENCE	DISCIPLINARY EXPERIENCE	GEOGRAPHIC EXPERIENCE	CULTURAL EXPERIENCE
Teacher	Psychology	Knowledge of urban Colorado	Familiarity with Mandarin language
Counselor	Engineering	Knowledge of rural Colorado	Experience living in India

Reflection Questions

- What lived experiences do you bring to the team? What are the known and unknown experiences? How might the elements of your experience shift in terms of consequentiality depending on your positionality and context?
- Think about the stakeholder groups and people you've identified so far. How does this list reflect them?
- What other experiences can you think of that are left off of this list?
- As you map yourself and the people and groups in your system, what patterns emerge?

STEP 04.

Identify the roles that team members could fill and skills they will need.

Roles

Weavers
I see the through-lines of connectivity between people, places, organizations, ideas, and movements.

Experimenter
I innovate, pioneer, and invent. I take risks and course-correct as needed.

Frontline Responders
I address community crises by marshaling and organizing resources, networks, and messages.

Visionaries
I imagine and generate our boldest possibilities, hopes and dreams, and remind us of our direction.

Builders
I develop, organize, and implement ideas, practices, people, and resources in service of a collective vision.

Caregivers
I nurture and nourish the people around me by creating and sustaining a community of care, joy, and connection.

Disruptors
I take uncomfortable and risky actions to shake up the status quo, to raise awareness, and to build power.

Healers
I recognize and tend to the generational and current traumas caused by oppressive systems, institutions, policies, and practices.

Storytellers
I craft and share our community stories, cultures, experiences, histories, and possibilities through art, music, media, and movement.

Guides
I teach, counsel, and advise, using my gifts of well-earned discernment and wisdom.

As a team, discuss, what are the roles that you think you need? What roles need to be filled to ensure the design work is aligned towards equity and justice? What roles need to be filled to ensure organization? What roles need to be filled to ensure community accountability?

Once your team has discussed roles, consider what skills collaborators need to have to fill those roles, for example, nurturing, aware of and responsive to emotional states, organized, experienced in quantitative data analysis, fluent in Vietnamese, proficient in graphic design, etc.

ROLES

SKILLS

STEP 05.

Map potential team members' influence on the system and relationships to each other.

How does this potential member influence the project aim and equity and justice in the local context?

How well do you know this person? How connected are they to other potential members?

Use the matrix on page 9 to review and organize your thinking from steps 1-4 for each potential team member.

Then, think about how each potential team members' network of influence and relationships with other potential members and capture your notes in the last three columns of the matrix. If all members of a team have a shared sphere of influence, or are already well connected to each other, you might consider reaching beyond your existing network.

STEP 06.

Synthesize and consider next steps.

After completing steps 1-4 take a moment to look back over your thinking and synthesize.

- Who are some people I know who could be good for the team?
- What more do I need to learn about organizations or people, to make sure my team is better prepared to address equity and justice?

Name & Organization (Step 1)	Contact Info	Connec-tion to this person	Position on Power Matrix (Step 2)	Lived Experience (Step 3)	Possible Roles & Skills (Step 4)	Sphere of Influence and Interaction (Step 5)	Network of Influence / Relations with other Possible Team Members

*Describe ways this person influences and interacts with the focal context of design.

*Place your row number next to each individual you know. Add a + if you know that person well.
Example: 3+ means Zembal-Saul knows Pittman well.

Reflective Listening & Values Surfacing

Handout 1: Roles Description

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This activity provides participants an opportunity to focus attention on certain elements of a shared story. To this end, the roles detailed below are significant to the success of this exercise. Please take the time to explain carefully and ensure everyone understands what they are doing/responsible for during each cycle of the activity.

THE STORYTELLER

Your role is vital and provides the "story" that your group will respond to as the activity unfolds. You will have 3-5 minutes total in which to share your complete story.

Please think carefully about a time in which you either:

- Faced a personal or professional challenge. This can be a story of triumph or hard lesson learned, but please include a sense of "why" this sticks in your memory as a significant moment for you.
- Undertook making a personal change in your life. This can also be a story of triumph or struggle, but please share what motivated you to want to make this change and what happened when you attempted to do so.

THE LISTENERS

These three roles are responsible for listening for the 3 distinct categories listed below. Review the Handout 2 - Feelings & Values Reference Sheet carefully while the Storyteller is prepping their tale. This sheet is meant to help guide you as you listen and jot down key words, reflections, and impressions while listening. You will have 2 minutes to share out what you heard so please be prepared to succinctly reflect back your reception of the story.

- Listener 1, Facts: Your role is to listen for the details of the story, paying attention to the who, what, where, when, or how of what you hear. Imagine you're an investigative journalist needing to release a quick summation.
- Listener 2, Feelings: Your role is to listen for the emotions expressed by the storyteller, paying attention to the feelings and tone portrayed in the story.
- Listener 3, Values: Your role is to listen for the priorities revealed by the story, paying attention to significance or judgements. Jot down what seems most important to the storyteller - is anything repeated? Emphasized?

Reflective Listening & Values Surfacing
Handout 2: Feelings & Values Reference Sheet

Feelings(+)

Adventurous
Affectionate
Alert
Alive
Amazed
Amused
Appreciative
Astonished
Carefree
Cheerful
Comfortable
Concerned
Complacent
Composed
Confident
Contented
Cool
Curious
Dazzled
Delighted
Eager
Ecstatic
Elated
Electrified
Encouraged
Energetic
Engrossed
Enlivened
Excited
Exhilarated
Expansive
Expectant
Exultant
Fascinated
Gleeful
Glorious
Glowing
Good-humored
Gratified
Happy
Helpful
Hopeful
Invigorated
Involved
Inquisitive
Inspired
Intense
Loving
Mellow
Merry
Mirthful
Moved
Optimistic
Overjoyed
Overwhelmed
Peaceful
Proud
Quiet
Radiant
Refreshed
Relieved
Satisfied
Secure
Sensitive
Splendid
Stimulated
Surprised
Tender
Thankful
Thrilled
Touched
Tranquil
Warm
Wide-awake
Wonderful
Zany
Zestful

Feelings (-)

Afraid
Agitated
Alarmed
Aloof
Angry
Anguished
Animosity
Annoyed
Anxious
Apathetic
Apprehensive
Averse
Beat
Bitter
Bored
Broken-hearted
Chagrined
Cold
Concerned
Confused
Cool
Cross
Dejected
Depressed
Despairing
Disgusted
Disheartened
Dislike
Dismayed
Displeased
Disquieted
Distressed
Disturbed
Downcast
Dread
Dull
Edgy
Embarrassed
Embittered
Exasperated
Exhausted
Fatigued
Fearful
Fidgety
Forlorn
Frightened
Frustrated
Furious
Gloomy
Grief
Guilty
Hate
Humdrum
Hurt
Impatient
Indifferent
Inert
Intense
Irate
Irked
Irritated
Jealous
Jittery
Keyed Up
Lazy
Lethargic
Listless
Lonely
Mad
Mean
Melancholy
Miserab;e
Mopey
Nervous
Nettled
Overwhelmed
Passive
Perplexed
Restless
Sad
Sensitive
Shaky
Shocked
Skeptical
Sleepy
Sorrowful
Sorry
Sour
Spiritless
Startled
Surprised
Tepic
Terrific
Tired
Troubled
Uncomfortable
Unconcerned
Uneasy
Unglued
Unhappy
Unnerved
Unsteady
Upset
Uptight

Values

Acceptance
Accountability
Achievement
Adventure
Attractiveness
Authority
Caring
Challenge
Comfort
Commitment
Community
Compassion
Connection
Cooperation
Creativity
Courage
Creativity
Dedication
Empathy
Equality
Excitement
Faith
Fame
Family
Freedom
Friendship
Fun
Generosity
Goodwill
Gratitude
Growth
Harmony
Health
Helpfulness
Honesty
Hope
Humility
Humor
Joyous
Jubilant
Justice
Inclusiveness
Independence
Intrigue
Integrity
Interest
Knowledge
Life
Love
Loyalty
Morality
Order
Patience
Peace
Power
Professional
Purpose
Recognition
Religion
Respect
Responsibility
Security
Service
Simplicity
Spirituality
Success
Tolerance
Trustworthiness
Understanding
Virtue
Wealth
Wholeness
Wisdom
Work

Inventory of Participatory Design Experiences

Examples of Shared Norms

Inventory of Participatory Design Experiences

Design Based Implementation Research

ASPECT OF FACILITATION *ROUTINE*	EXPERIENCES (AS A PARTICIPANT OR FACILITATOR)	IN THE FUTURE, I WOULD LIKE TO...
Creating and clarifying roles Helping people understand how their contributions will be elicited and taken up.		
Structuring ideation processes that amplify voices without power Helping people understand Setting up ways to ensure equity of participation, recognizing intersections of power and culture with dominant systems.		
Building consensus Helping diverse teams come to agreement on design directions, including when there are significant disagreements and consequences of particular choices.		
Building understanding of and commitment to ideas and values Helping a new design team identify what values animate members and can serve as a basis for shared work, as well as what theories and strategies are key to the work.		
Anticipating consequences of decisions Activity of imagining possible benefits as well as harms that might result from actions taken by a team for those present and those absent.		

ASPECT OF FACILITATION *OCCASIONAL, AS NEEDED*	EXPERIENCES (AS A PARTICIPANT OR FACILITATOR)	IN THE FUTURE, I WOULD LIKE TO...
Making initial contacts Making invitations to people and organizations to participate		
Boundary spanning moves Perspective taking, perspective making, guiding the sense that people make of something		
Brokering to bring in new expertise Identifying and inviting a new member mid-design, when it's realized someone is missing		
Integrating new members Integrating a new person into the co-design process		
Facing differences Naming tensions, disagreements, repairing relationships		
Recognizing confusion over terms Naming when people are using terms in ways that are familiar to some but not others or in ways that make it difficult for everyone to enter conversations		

We each bring experiences relevant to participatory design

Even if we have not been part of a formal co-design or participatory design process, we bring valuable skills and experiences to the table.

> Making an inventory of some of our skills as individuals that we can draw upon as resources can help us get organized in a way that can help us work toward **justice in our interactions** and support us in working toward **different aspects of justice we discussed.**

Adaptation note: These slides were adapted from a collaborative course lecture.
Penuel, B., Cortez, A., & Howe, E. (Spring, 2021). *Designing Curricula to Catalyze Systems Transformation*. University of Colorado Boulder.

Supporting Routine Work

Supporting Occasional, As Needed Work

Activity

Make a copy of pages 83 and 84, and spend 10 minutes completing it independently. It's OK if you don't finish.

Add anything from your self-inventory to a Jamboard.

in small groups, review the expertise and goals of the group members.

> **Discuss:** if we have a chance to work together, how do we make the most of the expertise of the group? How can this help us realize justice in our interactions with each other

30-45 MINUTES

For Whom are We Designing?

Authored by Bill Penuel

Activity Rationale and Aims

Aims

01.
Identify stakeholders and envision their desires, interests, and needs

02.
Identify common values and points of tension among team members

Rationale

When engaging in the design of a research study, curriculum, product, or process, it is critical to hold the intended audience at the center of the design process. The use of "design personas" can be a mechanism for designers to center the cultural, social and political aspects of design via imagining the users (Grudin & Pruitt, 2002).

Activity Summary

This activity centers the intended user or group in the design process. Co-design collaborators work in small groups to imagine a "design persona" of the type of person that the design could serve. Each "persona" will help the team envision salient desires, interests, challenges, and needs that the design should address.

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In Person Steps

As a whole group:

1. Introduce the activity of creating a "design persona" by sharing an example persona created by the facilitator prior to the meeting.
    a. To create the example, the facilitator should respond to the prompts below, developing a model that is specific to the project.
2. Review instructions:
    a. Each team envisions a specific user of the designed product.
    b. Who is this person? What are their specific lived realities, hopes, dreams, day-to-day activities? What are their histories, cultures, languages? Where do they live? What resources are available and not available to them?
    c. What do we want to learn about the people for whom we are designing? Keep this in mind as you design your persona.
3. Discuss, when doing this activity:
    a. How do we imagine hypothetical users from an asset-based perspective?
    b. How can we identify our own biases and assumptions?
    c. How do we imagine personas in detail without essentializing groups of people?

In pairs:

4. Create a "design persona," addressing questions in step 2b & 2c.

As a whole group:

5. Have each group share out, providing time after each presentation to discuss.
6. Identify considerations that should be accounted for in the design process.

Modifications and Virtual Adaptations

- If conducting this activity in a virtual environment, if the group is larger, encourage comments to be shared via chat during the share-outs and discussion. When brainstorming considerations that should be accounted for in the design process, have collaborators contribute ideas to a shared digital document.

Facilitator Preparation

IN-PERSON AND DIGITAL MATERIALS

- [ ] Prepared "design persona" to share out
- [ ] Google drive or other place to share and track group work
- [ ] Pre-identify groups of 2 people

HANDOUTS

- [ ] "Design Persona" Handout with key questions pairs can ask to inform their persona creation (create either digital or hard copies)

Facilitation Tips

- The discussion questions in step 2 are important to provide an asset-based framing to this activity. It is important that facilitators prepare ahead of time to facilitate this conversation by drafting responses to the focal questions.
- When sharing out, provide a set amount of time for each dyad so that all dyads have similar time to share out.
- Have one person in the dyad be an assigned notetaker.

Example from the field

As part of a co-design effort to develop a program for mindfulness and well-being on the CU Boulder Campus (The Mindful Campus Program), early in the process, a group of students, staff, and researchers worked to develop design personas for people that the group imagined might benefit from a campus mindfulness initiative. The purpose was to help the team gain a sense also of what they wish they knew about people who might benefit from the program.

Collaborators worked in dyads to come up with a persona in 20 minutes. The personas created were composites of people they knew, or made up completely. The personas included salient life experiences, such as experiences with meditation practices, and responded to questions about what might lead them to be seeking some connection to mindfulness, kindness, and compassion practices.

After completing their personas, the pairs shared their personas with others, and the group came together to discuss and summarize the diversity of concerns, goals, and experiences that they wanted to keep in mind when designing the program.

Commitments to Equity and Wellness

Participatory design is always “designing with,” but inevitably, most people who will engage with the work of a co-design team will not have been in the room. That being said, who is in the room when generating personas matters a great deal for being able to imagine the possible goals, concerns, and relevant life experiences of people for whom we are designing. In setting up this activity, make sure people in the room have connections to people whose experiences they know well who represent the range of possible collaborators in a program or users of a tool being designed. In addition, when creating personas, collaborators should consider their own positionality and strive to develop personas that reflect the assets and strengths of people they are representing, avoiding deficit-based views of others.

Personas that attend to wellness present people as whole beings, that is, as people with broad engagements and networks of relationships. It is easy to focus narrowly on a single context -- especially when developing a program or intervention for a specific context. But, people’s concerns and identities stretch across different engagements, and they draw support for their own well-being from multiple networks of people and from animal companions in their lives. Developing personas from this holistic perspective helps designers of wellness programs, because the personas consider how people cultivate and maintain their own well-being and that of their communities.

Additional Reading

Jurow, A. S., Teeters, L., Shea, M., & Van Steenis, E. (2016). Extending the consequentiality of "invisible work" in the food justice movement. *Cognition and Instruction*, 34(3), 210-221.

Lundh, P., Cheng, B., Penuel, W. R., Joshi, A., & Lesk, H. (2010). Design personas for teachable agents: *A qualitative tool for informing learning designs*. In K. Gomez, L. Lyons, & J. Radinsky (Eds.), Proceedings of the 9th International Conference of the Learning Sciences (Vol. 2, pp. 320-321).

Montagner, F., Stabellini, B., Di Salvo, A., Tamborrini, P. M., Marcengo, A., & Geymonat, M. (2017). *Data design for wellness and sustainability*. International Conference on Universal Access in Human-Computer Interaction (pp. 562-578).

Nieters, J. E., Ivaturi, S., & Ahmed, I. (2007). *Making personas memorable*. Proceedings of Computer-Human Interaction 2007 Conference (pp. 1817-1824).

Works Cited

Grudin, J., & Pruitt, J. (2002). *Personas, participatory design and product development: An infrastructure for engagement*. Proceedings of Participatory Design Conference, Sweden (Vol. 2, pp. 144-152).

60 MINUTES

Identify Indirect Stakeholders

Authored by Leah Peña Teeters

Activity Rationale and Aims

Aims

01.
Anticipate potential positive and negative impacts on indirect stakeholders

02.
Develop strategies to maximize benefits and minimize concerns

Rationale

Research and design projects have many impacts beyond the immediate user and collaborators. For example, while an intended intervention may be designed for teachers, their students will be impacted. Or, a program for youth may impact their families. Sometimes, though, the impacts are even more distal. Researchers and designers have the responsibility to anticipate the rippling effects of designed products so as to maximize benefits and minimize harm.

Activity Summary

Collaborators will identify 2-3 indirect stakeholders, defined as people who are affected by the research process or product, but who do not have direct interaction with it. Groups consider how the research process and products could affect indirect stakeholders and list concerns as well as benefits. Collaborators identify strategies to maximize benefits and minimize concerns.

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In Person Steps

As a whole group:

1. Explain the purpose of the activity and review the discussion prompts:
    a. Identify 2-3 indirect stakeholders and draft out details regarding their demographics, interaction with the research, etc.
    b. Identify a list of concerns as well as benefits for either how the indirect stakeholder will be impacted or take up the research.

In small groups:

2. Brainstorm the pathways that the research process and products could affect indirect stakeholders. For example, a course for educators could then impact students. Students could then share the content with their parents.

As a whole group:

3. Share out identified indirect stakeholders and potential concerns and benefits.
4. Take notes on the board or on large post-its, identifying themes in three categories: indirect stakeholder, concerns, and benefits as team members share out.
5. Engage in a discussion regarding strategies to maximize benefits and minimize concerns after all members have shared.

Modifications and Virtual Adaptations

- In some instances, the indirect stakeholder may not be human, but animals or the environment. Impacts to the natural world should also be explored, if applicable.
- If conducting this activity in a virtual environment, as small groups are presenting to the whole group, keep a collective notes document that identifies themes in three categories: indirect stakeholder, concerns, and benefits. During the discussion on strategies to maximize benefits and minimize concerns, if the group is large, have collaborators write their reflections on a shared digital document.

Facilitator Preparation

MATERIALS

- Board to write on or chart paper
- Markers
- Paper and pencils

HANDOUTS

- For digital facilitation, create digital worksheets for each group and write questions 1a and 1b in the worksheet

Facilitation Tips

- Provide examples of indirect stakeholders relevant to the research as well as concerns and benefits.
- When sharing out, provide a set amount of time for each group so that all groups have similar time to share out.
- Ask each group to identify a note-taker who will keep track of the group's responses to each question.
- This tool is complementary to the tool "Anticipate Challenges and Unintended Outcomes" and could be implemented together.

Example from the field

An interdisciplinary collaboration between pediatric physician scientists, public health workers, learning scientists, and parents in the local community had the shared goal of developing preventative health interventions for young children. The team was specifically focused on developing community based learning opportunities that would support healthy growth for young children (under 5 years of age) living in food deserts. Due to a lack of community based resources, such as fresh produce and safe places to recreate, children in this community disproportionately experienced high rates of obesity.

In developing a community learning program for young children, it was imperative to focus on the learning of the parents and thus the family with the young children. While initially, it was easiest to consider the ways that this would be beneficial for the entire family, it became critical to consider the ways that the messaging around health growth and healthy lifestyle needed to be tailored based on age. For example, many families had teenagers whose challenges with health and healthy weight were distinct from those of their young siblings. Considering how the messaging oriented at young children and their parents could be taken up by older siblings helped the team to include a framing that would be supportive to the older siblings, and ultimately resulted in the development of a more nuanced and thoughtful design.

Commitments to Equity and Wellness

Intent does not equal impact. The intent of a program may have unanticipated impacts on unanticipated and indirect stakeholders. It is researchers' and designers' responsibility to imagine the downstream effects of designed programs so as to maximize benefit and minimize harm. The aims of a designed program, intervention, or research should center questions of equity and collaborators should do the work to understand their own bias, so as to anticipate where their vision may fall short. And still, there is always a risk (and probability!) of unintended consequences (both negative and positive). It is the responsibility of researchers and designers to invest time into understanding potential outcomes and ripple effects for both direct and indirect stakeholders, and consequently designing to reduce potential harm and enhance potential positive impacts.

Additional Reading

Akkerman, S., Bakker, A., & Penuel, W. R. (2021). Relevance of educational research: An ontological conceptualization. *Educational Researcher*.

Bang, M., Medin, D., Washinawatok, K., & Chapman, S. (2010). Innovations in culturally based science education through partnerships and community. In M. S. Khine & M. I. Saleh (Eds.), *New science of learning: Cognition, computers, and collaboration in education* (pp. 569-592). Springer.

Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, 79(3), 409-427.

20 MINUTES

Head, Hand, and Heart

Authored by Vanessa Roberts

Activity Rationale and Aims

Aims

01.
Engage in reflection at critical junctures to help inform next iterations

02.
Generate more humanizing processes that incorporate thought, feeling, and action

Rationale

This activity provides a space for individual and communal reflection to support navigating important junctures in a co-design process. Team members will engage in holistic reflection (hand, head, heart) on phases of the project.

Activity Summary

Collaborators reflect on work done during a specific phase, including accomplishments, challenges, and thoughts about the future by engaging in critical reflection of lessons learned, feelings about the project, and what they remember the most. This activity is helpful throughout the design phases and can be particularly relevant when closing a session that is part of a multi-day design series, or when seeking to create intentional pauses in the midst of the work.

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In Person Steps

Individually:

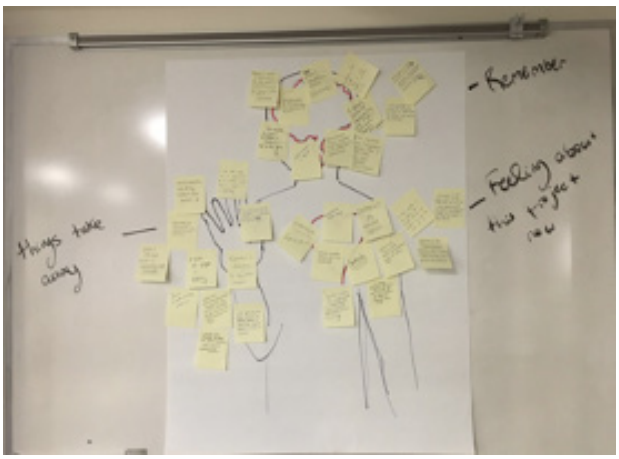
1. Prompt the team to respond to the following three questions on sticky notes:
    a. What are some concrete lessons learned in this iteration that you hope can inform actions in the next iteration of this project? (Hand - doing)
    b. How are you feeling about the project right now? (Heart - feeling)
    c. What do you want to remember the most about this project? (Head - thinking)

As a whole group:

2. Circling around the room, have collaborators place their sticky notes in the respective areas on the figure. Have collaborators read their stickies as they place them on the figure (head, hand, heart).
3. Circle around the image and observe the collective response.
4. Engage in discussion on commonalities and differences.

Modifications and Virtual Adaptations

- The prompts can be modified to meet the project goals. You will want to get a reflection on thinking, feeling, and doing, however, the specific questions can be modified.
- If conducting this activity in a virtual environment, share the three reflections questions in a shared google doc, and ask collaborators to jot down their responses on paper, encouraging them to turn videos off during reflection time. Have collaborators split into pairs, reflect together, and write responses in the shared google doc. Then as a whole group, have collaborators share their thoughts, review the document together, and engage in a conversation on commonalities and differences.



Facilitator Preparation

IN-PERSON MATERIALS

- Giant sticky notes OR butcher paper and tape
- Small sticky notes
- Pens and markers
- Large sticky with an empty figure with a head, heart, and raised hand on a piece of butcher paper or a large sticky note.

DIGITAL MATERIALS

- Prepare a google doc with a silhouette image of a person or outlines of a head, heart, and hand. Beneath the image include three sub-categories with space to write titled head, hand, and heart. Include questions 1a-1c of the in-person steps in the google doc.

Facilitation Tips

In-person

- Prepare a life size figure outline on large paper ahead of time. In your picture, you may want to highlight a brain in the head, a heart, and hand.

Specific Tips for Online Facilitation

- During the closing and the reflection, if the group is larger than 8, break into two small groups or use the chat feature.

Example from the field

This activity has been used across diverse projects. Collaborators have found it useful as both a closing activity as well as an activity used to create intentional pauses and reflections at critical junctures in the design work. Collaborators have reported that it is easy to slip into a mode of thinking and productivity when in the space of collaborative design and this activity helps the group engage their feelings, alongside their thinking, so as to orient towards action. For example, in a collaborative curriculum design process, the group was making great progress towards the completion of the design goals of filling in templates of activities and developing supporting materials. However, the facilitator noted that the group's urge towards productivity was taking precedence over reflection. The facilitator created a space to pause and engage in the head, hand, heart reflection. This pause supported the group to engage their feelings more fully, which then resulted in having some challenging and critical conversations about assumptions and biases that the group was making in the design work. Engaging their heart, alongside their heads, allowed for them to center the intended outcomes (the hands) of the design project more fully, shifting their design process to be more reflective of their own assumptions and biases.

Commitments to Equity and Wellness

Engaging the affective domain alongside the cognitive domain determines what actions, if any, are taken to promote equity and justice and dismantle oppression (Hunsberger et al., 2016). This activity can provide a starting place for engaging in critical, challenging, and heartfelt conversations that can be used to catalyze action. It centers the equal roles of thought, feeling, and action as valuable design elements and underscores multiple ways of knowing. Making space for multiple ways of knowing in the co-design environment invites collaborators to bring their full-selves to the design work, which can support a potentially more humanizing experience that attends to the process before the product of design (Paris & Winn, 2013).

Additional Reading

Wheatley, M. J. (2009). *Turning to one another: Simple conversations to restore hope to the future*. San Francisco: Berrett-Koehler.

Works Cited

Hunsberger, P., Mayo, B., & Anthony, N. (2016). *Becoming a Social Justice Leader: Using Head, Heart, and Hands to Dismantle Oppression.*

Paris, D., & Winn, M. T. (Eds.). (2013). *Humanizing research: Decolonizing qualitative inquiry with youth and communities*. SAGE.

30 MINUTES

Anticipate Challenges and Unintended Outcomes

Authored by Leah Peña Teeters

Activity Rationale and Aims

Aims

01.
Identify challenges and unintended outcomes

02.
Develop strategies to mitigate challenges and unintended outcomes

Activity Summary

Collaborators develop operational definitions of equity that can be used to help consider ways that the research or design may impact different identity groups. Collaborators brainstorm key challenges and potential unintended outcomes. In small groups, collaborators build out one of the key challenges or unintended outcomes, developing a short vignette. Groups share out and develop a list of strategies that could help to mitigate negative consequences.

Rationale

Research and design projects inevitably encounter unanticipated challenges as well as outcomes. While this is inevitable, collaborators have a responsibility to anticipate potential downstream impacts so as to mitigate the chance for harm. Imagining potential challenges as well as ways that research and design can be taken up helps to minimize the potential for unforeseen consequences.

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In Person Steps

As a whole group:

1. Develop a shared definition of equity. Specifically operationalize it in the context of this specific project. Suggested prompts:
    a. How do we define equity?
    b. How will we know if our work is oriented-towards equity? How will we know when the work is moving away from equity?
    c. What does equity look like, feel like, sound like? For whom?
2. Keeping these shared ideas of equity central, brainstorm key challenges and unintended outcomes.
    a. Who might misconstrue the research?
    b. How might it be used for unintended purposes?
    c. What ways may the research be adapted?
    d. How might ideas or constructs be taken out of context and/or taken up by users in ways that do not align with original commitments to equity?

In small groups:

3. Build out one of the key challenges or unintended outcomes, developing a vignette of how it could develop.
    a. When considering how it will play out, groups should develop two pathways, one if left unaddressed, and one if addressed.

As a whole group:

4. Share vignettes.
    a. Engage in a discussion and develop a list of strategies identified that can help to mitigate negative consequences and encourage positive outcomes.

Facilitator Preparation

IN-PERSON MATERIALS

- Board or chart paper
- Markers
- Pen and paper

DIGITAL MATERIALS

- Google drive or other place to share and track group work

Modifications And Virtual Adaptations

- The probing questions should be modified to meet the needs of the specific research project.
- If conducting this activity in a virtual environment, ask for collaborators to write responses in the chat feature of the online platform when brainstorming key challenges and unintended outcomes. Utilize breakout rooms for the small group portion, and then have each group share their discussion when everyone comes back together. Ask collaborators to write strategies in the chat that can help to mitigate consequences before opening up the discussion to short reflections and questions.

Facilitation Tips

- In whole group discussions, remind collaborators of the principle of 'leaning in and leaning out' to make sure that all voices are heard.
- In small group discussions, if not everyone is participating, assign roles (e.g. note taker, synthesizer)
- Provide ample examples of the tasks, as relevant to the research.
- This tool is complementary to the tool "Identify Indirect Stakeholders" and could be implemented together.

Specific Tips for Online Facilitation

- When engaging in whole group discussions for groups larger than 10 people, consider asking all collaborators to share out, with the person talking calling on the next person, or make sure that folks have a chance to write their reflections, to ensure all perspectives are gathered.

Example from the field

When looking at broad implementation of scientific research, examples abound of research that has been taken out of context and/or had unintended, rippling effects (see Kirschner & van Merriënboer, 2013; Pashler et al., 2008; Stitzlein, 2017). While there is always some degree of risk that this may happen, it is helpful to proactively consider the ways that research and design could be taken up.

In the example of a multimodal storytelling project that supported community building via photography and narration of first person accounts, initial pilot data indicated that students found the process of telling their stories via photography as well as narration to be healing (see Trejo et al, 2022). The stories and experiences that students chose to share were personally meaningful to them and were intended to be used to advocate for systematic change within the school district. However, after initial pilot sessions, the design team paused to engage in this process to ask critical questions about how these stories may be received outside of the trusting community in which they were shared. In what ways could receiving the stories impact listeners/readers, and in what ways could hearing these stories put the students in vulnerable situations? The team adapted the steps in this protocol to meet their specific context and consequently were able to refine the delivery medium, intended audience, and facilitator protocols so as to mitigate the risk for unintended outcomes.

Commitments to Equity and Wellness

Throughout the course of research and design, the original plans will ultimately veer from the intended course. If the team is prepared for unanticipated challenges via a central commitment to equity and consideration of the ways that that commitment to equity could be challenged, there is greater chance that the team will be prepared to see challenges as opportunities for growth. Moreover, there is a need to imagine ways that programs will be sustained and taken up in new ways and places, so as to build in processes and procedures to reorient to equity so as to maximize benefit and minimize harm.

This activity is designed to promote the wellbeing of the broader ecosystem in which a designed activity is situated. Via anticipating challenges and unanticipated outcomes, we can plan so as to promote the wellness of the broader ecosystem and intentionally plan to mitigate the risk of causing unintended harm.

Additional Reading

Akkerman, S., Bakker, A., & Penuel, W. R. (2021). Relevance of educational research: An ontological conceptualization. *Educational Researcher*.

Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, *79*(3), 409-427.

Works Cited

Kirschner, P. A., van Merriënboer, J. J. (2013). Do learners really know best? Urban legends in education. *Educational Psychologist, 48*(3), 169–183.

Pashler, H., McDaniel, M., Rohrer, D., Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest, 9*(3), 105–119.

Stitzlein, S. (2017). Teaching for Hope in the Era of Grit. *Teachers College Record*, 2017, p. 1-28

Trejo, B., Teeters, L.P., Zigarelli, J., Gleason, E., Shedro, M., & Alvarez, A. (2022, April 21-26). *Circles de confianza: Promoting the well-being of culturally and linguistically diverse youth via multimodal testimonio* [Paper presentation]. AERA Conference 2022, San Diego, CA.

60 MINUTES

Think, Pair, Share

Authored by Leah Peña Teeters & Jade Gutierrez

Activity Rationale and Aims

Aims

01.
Engage in shared discussion to support decision making

Activity Summary

This activity aims to encourage reflection and dialogue on key decisions. It can be adapted to address project specific decisions, such as choosing a research question, identifying a target population, or choosing a tension or challenge to focus on overcoming. Decision options will be hung on giant sticky notes throughout the room. Co-design collaborators will walk around the room and read each option, selecting their top three options. Collaborators will discuss their decisions in pairs before engaging in a whole group discussion.

Rationale

Making decisions is an inevitable and critical part of every collaborative project. It is not only an opportunity to determine consensus at critical junctures and outcomes, it is also a valuable opportunity to reveal divergent perspectives that can enhance the development of the project (Bahktin, 1990; Nathan et al., 2007). The process of discussion that emerges from analyzing differing perspectives presents possibilities for deepening individual and collective thought.

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In Person Steps

As a whole group:

1. Summarize the decision that is needed to be made, providing ample context. Review the options for each decision.
2. Post the different options around the room, on large chart paper.

Individually (think):

3. Provide time for collaborators to consider and develop a written reflection on their own decision.
4. Distribute three sticky notes to each collaborator.
5. Ask each collaborator to vote on their top three choices by placing a sticky note on the chart paper they vote for.
6. Review the collective votes, discussing which ones appear to have most votes.

In pairs (pair):

7. Discuss the rationale behind collaborators' own votes.

As a whole group (share):

8. Have all collaborators discuss what they voted for and why, and if their opinions shifted at all. Visit every option with the group regardless of number of votes. Engage in a highly facilitated discussion of the pros and cons of different decisions.
9. After discussion, invite collaborators to change the placement of their sticky notes, if their mind has changed.
10. Repeat voting as needed until consensus is reached or until a decision is made to continue looking into a few options further before deciding.

Modifications and Virtual Adaptations

- While this is not an anonymous activity, once all "votes" are placed, they are equally represented, without consideration to the power and positionality of each person. If the team wants a truly anonymous process, consider submitting the "votes" on notecards, that then can be visually sorted and represented (e.g each decision card is then pasted on the board in categories).
- If conducting this activity in a virtual environment, have collaborators individually review the digital documents providing options for potential resolutions to the decision. Then provide ample time for collaborators to vote on their top three choices by using one, two, or three asterisks next to their choices in the shared document.

Facilitator Preparation

IN-PERSON MATERIALS

- Chart paper with a decision option
- Sticky notes
- Materials to take notes (e.g. pen, paper, audio recorder)

DIGITAL MATERIALS

- Slides decks with the different decision options

Facilitation Tips

- The facilitator should keep a record of the conversation and store all materials in both physical and digital archives for later reference, and send a summary of the key decisions made to the team after the meeting.
- Allow for adequate time for reflection and sharing out. Decisions do not have to be made in one day if consensus cannot be reached. The goal is for every decision to be weighed carefully, and for every voice to be heard.
- It is important to closely facilitate the discussion, paying attention to shared discussion space, making sure not to prioritize some voices over others.
- The power and potential of this activity is in the discussion that arises. It is critical to give thought to the facilitation and allocate ample time.

Specific Tips for Online Facilitation

- Go around the digital screen to ensure all voices are heard.
- If there are too many people in the whole group discussion, consider using the chat feature or breaking into two groups (keep detailed notes!)

Example from the field

This activity has been used in a collaboration that included university faculty, high school students, university students, and school educators. The collaboration brought together people of different ages and educational experiences. This diversity in age and education was critical to the design success, and involved inherent structures of power and authority along lines of educational attainment and age. Engaging in this process where all votes were visually displayed and weighted equally, allowed for team members to consider the opinions of the group without consideration of their age, education, or other identity statuses. It presented the opportunity for the team to engage in discussions about the importance of divergent perspectives as well as to identify points of consensus.

Commitments to Equity and Wellness

Collaborative research and design brings together people from different backgrounds, identity statuses, and professional roles. In these collaborative spaces, there is great potential to generate processes with intentional structures for shared and distributed decision-making that validates, includes, and cares for all collaborators. However, there is also a risk that collaborative processes reinforce traditional hierarchies and power structures, where those with the most positional power ultimately end up making the decisions and the rest of the team agrees or comes to false consensus. This activity is intended to make collaborators' votes mostly anonymous and present a visual model that weighs all collaborators' votes equally.

Works Cited

Bakhtin, M. M. (1990). *Art and answerability: Early philosophical essays*. University of Texas Press.

Nathan, M., Eilam, B., & Kim, S. (2007). To disagree, we must also agree: How intersubjectivity structures and perpetuates discourse in a mathematics classroom. *Journal of the Learning Sciences*, 16(4), 523-563.

60 MINUTES

Guidelines for Authorship

Authored by Leah Peña Teeters & Jade Gutierrez

Activity Rationale and Aims

Aims

To provide guidelines and considerations to guide authorship decisions and processes.

Rationale

These guidelines are meant to provide research teams working in collaboration with youth and community partners some points of reflection with regard to considering how to allocate authorship. Suggestions are also outlined to guide the process for when teams decide to write collaboratively.

Activity Summary

These considerations, or guidelines, are meant to be supplementary to the APA authorship guidelines, ICMJE authorship guidelines, APA inclusive language guidelines, or other guidelines relevant to the area of study. It is strongly suggested that teams start with APA and/or ICMJE authorship guidelines as well as the APA tips and resources. Once teams are well versed with these established guidelines, they can explore the guidelines below to help support the process of collaborative writing.

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Guidelines for Determining Co-authorship

- Co-authorship of participatory projects needs to meet authorship requirements in the field and for the journal. Adherence to authorship guidelines ensures that the work is appropriately attributed to those involved in preparing the manuscript and ensures that if community/youth collaborators are included as authors, their perspectives, ideas, and voices are respectfully represented.
- It is wise to begin conversations about authorship early in the process of forming trusted teams and building transparency of roles.
- When representing a community, beyond individual members of that community, co-authors may be listed "on behalf of the [community]" (Castleden et al., 2010).
- When community/youth collaborators do not meet authorship guidelines that have been adopted by the team, it is an option to include the community/youth collaborators in the acknowledgements, e.g. "This project wouldn't have been possible without the participation and permission of the community" (Castleden et al., 2010).
- When writing collaboratively, it is possible to include an authorship statement, rather than just mentioning that community partners were co-authors.
    - For example: Author Contributions: Conceptualization, M.E.G. and J.L.L.; methodology, M.L.; investigation, M.L. and C.Z.-Y.; writing—original draft preparation, M.E.-G.; writing—review and editing, J.L.L.; data curation—C.Z.-Y.
    - It is also possible to denote roles in the text of the article. For example: "This paper is co-authored by youth co-researchers. In the interest of transparency, we use the first person singular to signal decisions made by the adult facilitator, while first person plural represents the perspective of youth involved in the YPAR collaboration. We further distinguish between youth as co-researchers and our interview participants, as the experiences of both constitute sources of data relevant to this study. These representational decisions are discussed in the methods section" (Bellino et al., 2018).
- It may be helpful to distinguish between youth as co-researchers (and co-authors) and study participants (Tuck et al., 2008). Co-researchers are key study personnel engaged in the design and analysis of the study, whereas, participants are consented study subjects that engage in activities specific to data collection, such as completing a survey, engaging in an interview, etc.
- Hold in mind that academic publications are not the only form — and sometimes not the most effective form — of collaborative writing and sharing with youth or community collaborators. Though the intent may be to be inclusive, sometimes, inclusion in academic writing without adequate training can generate power differentials where youth and community ideas

Considerations For Collaborative Writing

- Ask the youth/community collaborators to review and approve parts of the paper that are not written by the youth/community collaborators.
- During data analysis discussions, record comments and words that show collaborator insights. Reflect and document frequently.
- Consider which writing roles are best matched for which types and levels of academic training. For example, the academic research collaborators may have more experience with writing a literature review and methods section, while the discussion and implications may be an important place to closely involve youth and community collaborators so as to make sure their voices are accurately reflected.
- Consider group writing sessions that include deliberate structures, scaffolds, and roles.

Commitments to Equity

Close adherence to authorship guidelines is an imperative issue of equity and ethics. Gift authorship, defined as authorship given to a person who has not contributed significantly to a manuscript, most frequently benefits those who are in power and can marginalize those with less power (Jurow & Jurow, 2018). Conversely, not including those who have made central contributions to the writing and research makes their work invisible and is inequitable. Academic writing may be the appropriate way to honor intellectual contributions, however, close consideration of authorship guidelines may also suggest other forms of writing together, for example, a community brief, or engaging in non-writing activities, such as community panels and conference presentations. Considering a range of ways to share and honor intellectual contributions supports all collaborators to feel valued and honored.

Additional Reading

Christensen, C., & Atweh, B. (1998). Collaborative writing in participatory action research. *Action research in practice: Partnerships for social justice in education*, 239-340.

Gardner, M. (2018). Writing together for academic publication as a youth-adult PAR team: moving from distance and distaste towards transformative engagement. *Educational Action Research*, 26(2), 205-219.

Kalichman, M., Magnus, P. D., & Plemmons, D. (2001). *Authorship*. Resources for Research Ethics Education.

Works Cited

Bellino, M. J. (2018). Closing information gaps in Kakuma Refugee Camp: A youth participatory action research study. *American Journal of Community Psychology*, 62(3-4), 492-507.

Castleden, H., Morgan, V. S., & Neimanis, A. (2010). Researchers' perspectives on collective/community co-authorship in community-based participatory Indigenous research. 5(4), 23-32.

Jurow, A. S. & Jurow, J. (2019). We need to talk about authorship abuse. *Inside Higher Ed.*

Tuck, E., Allen, J., Bacha, M., Morales, A., Quinter, S., Thompson, J., & Tuck, M. (2008). PAR praxes for now and future change: The collective of researchers on educational disappointment and desire. In J. Cammarota & M. Fine (Eds.), *Revolutionizing education: Youth participatory action research in motion* (pp. 49-83). Routledge.

60 MINUTES

Collaborative Qualitative Coding

Authored by Leah Peña Teeters & Ashley Potvin

Activity Rationale and Aims

Aims

Teams will work together to identify and analyze themes in the data.

Rationale

Analyzing data is a central part of research and design projects. In research, it informs analysis and the framing of findings, and in the design of tools and products, it supports the iterative design cycle. Though data analysis has traditionally been conducted by researchers, it is really important to include stakeholders and collaborators in the process of collaborative meaning-making and analysis for several reasons, including: a) to ensure that stakeholders and collaborators are respected and acknowledged as valuable partners in the work; b) to ensure that all collaborators' perspectives and voices are represented in the analysis and conclusions drawn; and c) to strengthen the validity and reliability of the claims made.

Activity Summary

This activity draws on a constructivist approach to grounded theory where collaborators construct meaning via an inductive exploration of qualitative data (Charmaz, 2006). They will work together to identify emergent themes and then refine those themes into categories. Collaborators will then use those categories to systematically analyze a specific set of data.

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In Person Steps

Prior to the meeting:

01. Facilitators should identify 6-8 rich segments of data that are representative of the larger data set. This may include things like interview or focus group transcripts or open-ended responses to a questionnaire.

    a. These data segments should be no longer than 3-4 sentences, if it is written or transcript data. Facilitators should print out the data segments in larger print, as well as the more complete transcript, so that collaborators can understand the data segments in context.

As a whole group:

02. Revisit the focal questions of the group and clarify the unit of analysis. That is, what is the group looking for?

In small groups:

03. Review the selected piece of data. Have each collaborator take notes on which themes they see emerging.

04. Have collaborators discuss their notes and decide upon common themes.

    a. Make sure that each collaborator explains their rationale and provides examples for the themes.

05. Have collaborators write their common themes on sticky notes.

As a whole group:

06. Have each group share to the whole group by reading their sticky note, and then placing it on the wall.

07. If another group has a similar theme to what was previously presented, group the sticky notes together.

08. Once all small groups have shared, discuss the groupings of themes:

    a. What are the broader categories?

    b. Which term is most accurate?

    c. Develop consensus on how the grouping of themes should be presented in one or two words- this will be the code.

09. Develop a chart that identifies the code, a definition, and an example for each code. This is the team's coding scheme.

10. Once the coding scheme has been developed, pass out cut up segments of data. On the board, write out the codes, and have collaborators tape the segments of data under the codes that they think are most appropriate.

    a. If different perspectives arise, facilitate a conversation about how the data and the codes are being interpreted until consensus is reached.

11. Once all groups have categorized their pieces of data under codes, discuss any challenges that arose.

12. By the end of the activity, collaborators should have a shared understanding of how to operationalize the codes. At this point, once consensus has been developed, and all perspectives have been heard, it may be appropriate to have a smaller group of collaborators work to code a more comprehensive data set over the course of several weeks.

13. Once the whole data set is coded and analyzed, the coded data should be brought back to the whole group. At which point the coders should share out key themes and findings to ensure that all collaborators agree with the ways that data has been analyzed and interpreted.

Modification Notes

This activity can be modified to meet the needs of the group.

Facilitator Preparation

MATERIALS

- Pre-identified piece of data (e.g. interview transcript, focus group questions, open ended survey responses) in a document form
- The same piece of data in larger print and cut up into sections
- Sticky notes
- White board
- White board markers

Example from the field

This activity was done with a youth participatory action research team collaborating with university educators to understand young people's experiences of feeling grounded in their bodies. Collaborators were asked to submit an artistic depiction of when they felt grounded and submit an audio clip explaining what grounded meant to them. To analyze the art and audio, the youth team and adult researchers worked together to identify emergent themes and then code the data under those themes. These themes were then used to inform the design of an intervention to support young people to eel grounded in their body.

Facilitation Tips

It is recommended that facilitators are familiar with qualitative data analysis prior to engaging in this activity. Facilitators should be prepared to facilitate a conversation about what constitutes a pattern or theme.

It is important to carefully select the piece of data so that there is rich enough information to generate patterns and conversation and that it is not too long.

It is important that the facilitator closely attends to the process of establishing consensus and moderates conversation to ensure that all perspectives are heard and valued.

Make sure that all data that is shared is anonymous and that all collaborators are on the IRB protocol, if relevant. Make sure that this activity is in compliance with the IRB protocol, if relevant and if human subjects are involved.

If time allows, it would be beneficial to schedule one more time to repeat this process to allow for a deeper shared understanding of the codes.

Commitments to Equity

Traditionally, data has been coded and analyzed by researchers, without the collaboration of stakeholders. Research that honors multiple truths and that acknowledges multiple ways of knowing and being necessitates that the process of analyzing data incorporates multiple perspectives. Bringing stakeholders into the process is critical to the development of analytic frameworks and shared understandings of key constructs in a way that reflects the values, experiences, and knowledge of stakeholders. Excluding the perspectives of stakeholders in the data analysis process could misrepresent the stakeholders. Engaging in collaborative processes of data analysis has the potential to mitigate the risk for harm and holds great opportunity for generating rich understandings and processes that support the wellbeing of all collaborators.

Additional Reading

Bejarano, C., García, M., Juárez, L., & Goldstein, M. (2019). Decolonizing ethnography: Undocumented immigrants and new directions in social science. Duke University Press.

Bishop, R. (1998). Freeing ourselves from neocolonial domination in research: A Maori approach to creating knowledge. International Journal of Qualitative Studies in Education, 11(2), 199–219.

Cahill, C. (2007). The personal is political: Developing new subjectivities through participatory action research. Gender, Place & Culture, 14(3), 267–292.

Denzin, N. K., & Lincoln, Y. S. (Eds.) (2018). The Sage handbook of qualitative research (5th ed., pp. 1-19). Sage.

Fine, M. (1994). Working the hyphens: Reinventing self and other in qualitative research. In Denzin, N. K., Lincoln, Y. S. (Eds.), Handbook of qualitative research (pp. 70–82). Sage Publications, Inc.

Thambinathan, V. & Kinsella, E. A. (2021). Decolonizing methodologies in qualitative research: Creating spaces for transformative praxis. International Journal of Qualitative Methods, 20.

Zavala, M. (2013). What do we mean by decolonizing research strategies? Lessons from decolonizing, Indigenous research projects in New Zealand and Latin America. Decolonization: Indigeneity, Education & Society, 2(1), 55–71.

Works Cited

Charmaz, K. (2006). Grounded theory. In G. Ritzer (Ed.), Encyclopedia of sociology. Blackwell.

7-10 HOURS
over multiple
time points

Develop and Analyze a Practical Measure

Authored by Ashley Potvin & Leah Peña Teeters

Activity Rationale and Aims

Aims

01.

Teams will work together to develop a practical measure

02.

Teams will collectively analyze practical measure data to inform iterations and next steps

Activity Summary

This tool supports collaborators in designing, implementing, and using the results of a practical measurement. This process supports teams to evaluate a small change introduced into the system so as to enhance the outcome in timely and collaborative ways. This practice should be implemented as an iterative cycle that involves enacting a measurable activity, administering the practical measure, analyzing results, making changes to the activity based upon the analysis, enacting the revised activity, and once again administering the survey.

Rationale

Practical measures are short measures, usually a brief survey, that are used to determine whether a change introduced in a particular context is actually an improvement and meets the project's goals. These measures are "practical" in the sense that they are relatively quick to complete, they can be embedded into an existing routine (i.e., used as part of practice), and they are administered frequently. Practical measures should include just a few pointed questions that are specific to the context and customized for the specific population that will be responding. When they are easily scorable (e.g., use of yes-no response formats, or put into a tool like Google Forms), they are more easily used. Practical measures should be directly linked to the objective or goal and should be specific to the intervention or change idea implemented (Yeager et al., 2013).

Data from practical measures are used to inform iterations and next steps (Bryk et al., 2015). Practical measures are distinct from validated measures, and are designed to be contextually dependent and responsive. Collecting and analyzing data as a team provides opportunities for collaborators to evaluate the change introduced, to reflect on their roles as it relates to enacting the change, and to problem-solve if the change does not produce an improvement.

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In Person Steps

PART 1: COLLABORATIVELY DEVELOP A PRACTICAL MEASUREMENT

01.

Introduce the concept of a practical measurement as a way of supporting project goals and positively impacting design.

a. The purpose of a practice measure is to **support improvement**. Practical measures are practical in three senses:
   - They can be embedded into existing routines and practices.
   - They are **quick and easy** to administer and analyze.
   - They are **about** practice, focusing on a change idea or new activity.
   - The kinds of items that are valuable can ask about:
     - What participants *did*
     - How participants *experienced* a practice
     - How a practice relates to an *identity* of the participant

02.

Identify the context and aims of implementing a practical measure. What are the key constructs intended to be measured? Who is the audience?

03.

Collaboratively review previously tested surveys about the topic/construct. (Note: In advance of the meeting, the facilitator identifies relevant survey items to share with the group and adds them to the first column in the Creating our Practical Measure table.)

a. Share the filled in Creating Our Practical Measure document with collaborators.
b. Participants begin by reviewing each item and marking the items they think will yield actionable information (second and third columns).
c. Participants then brainstorm ideas about what they would do if a survey respondent rated an item low (fourth column).
d. Lead a discussion about the group's key noticings and wonderings.
   i. This could include identifying popular items and/or challenging items. It might also include noting what is missing from these items related to your change idea.
   ii. Encourage collaborators to revise items to better fit the specific context. If you are concerned about data quality, discuss what could help improve the quality of data (e.g., giving people sufficient time to respond; framing the purpose for respondents).
   iii. Guide collaborators to also discuss the pros and cons to different question formats (e.g., multiple choice/multiple select are descriptive statistics and easy to aggregate; open-ended responses can be coded).

In Person Steps

PART 1: COLLABORATIVELY DEVELOP A PRACTICAL MEASUREMENT (CONT.)

04.
From the shared notes, develop a draft of key survey items and organize them by construct.

05.
Invite collaborators to comment on the items and suggest which to keep or remove based on the group's goals and what they want to learn about the change idea.

06.
Discuss pros and cons of different formats for distributing the survey (index cards, paper survey, Google forms, Qualtrics).

a. What platform is most accessible given the context and audience?

b. How will the data be analyzed?

c. How will privacy of the data be protected?

d. What is the ideal frequency of data collection?

07.
Decide upon the ideal frequency of data collection and determine when the survey will be distributed (e.g., at the end of a weekly meeting, at the end of a class period). Determine who will be responsible for distributing the practical measure survey and collecting it.

PART 2: IMPLEMENTING A PRACTICAL MEASUREMENT

01.
Distribute the practical measure survey to the groups of people identified in the previous step.

02.
After one round of data collection, the facilitator should prepare visual representations of the data.

PART 3: ANALYZING THE DATA

01.
Ask collaborators to have a brief discussion with a partner before analyzing the data.

- What would count as a successful pattern of responses in the data? What are we hoping to see?
- How will we feel if we don't yet see what we hoped for?
    - What might we do in that case?
    - How might we support one another if we don't yet see what we hoped for?

In Person Steps

PART 3: ANALYZING THE DATA (CONT.)

02.
Then, share the data and visual representations with collaborators. Invite collaborators to review the data on their own first, posing the following prompts to guide their initial analysis. Consider asking collaborators to jot down their reflections, thoughts, and feelings as they review the data.

- Begin by making low inference observations that describe what happened without drawing conclusions or making judgments.
- What stands out to you?
- What are you proud of?
- What would you like to improve?

03.
Ask the group to divide into small groups (3-4 people) to discuss the data and keep notes in a shared document. You may wish to use the following prompts, or adjust them based on your context.

- How did you feel when you saw the data?
- What are you proud of?
- What would you like to improve?
- What, if anything, is confusing in the data?
- What patterns do you notice?
- What are the points of variation that you notice?
- What can we learn from outliers?
- How do these results compare to our hypotheses?

04.
Facilitate a group discussion. Begin by asking groups to summarize their small group discussions. Then, guide the group to think about how they could use the results from the data to iterate on the change idea and/or revise the practical measure survey.

- What can we learn from this analysis?
- Did implementing the change have any unintended effects, and if so what? How might we address these unintended effects?
- What might we want to alter in the design based on this data?
- What do we need to support those alterations?

PART 4: ITERATING ON THE CHANGE IDEA AND THE PRACTICAL MEASURE

01.
Using the analysis and discussion, determine if/how you will revise your design/change idea in the next cycle.

02.
Depending upon the revisions, collaborators could form small groups to work on this within the meeting or the facilitator could make the proposed revisions in between meetings and share them with the group for feedback and approval.

In Person Steps

PART 4: ITERATING ON THE CHANGE IDEA AND THE PRACTICAL MEASURE (CONT.)

03.
Then, implement the updated changes and then distribute the practical measure to collect data on whether or not the change was an improvement.

04.
After data has been collected, repeat the cycle of collectively analyzing the data and iterating on the design.

05.
Repeat the entire process of implementing the revised design, collecting and analyzing data, and iterating on the design.

After several rounds of iterating on the design, lead a discussion about how this process could be sustained.

- Could your group or others in the system continue to use this survey to gauge progress?
- What would that look like?
- Who would implement the survey? How often?
- When would you analyze the data?

MODIFICATIONS AND VIRTUAL ADAPTATIONS:

- Adjust prompts based on your group and context.
- Experiment with how you will share the data with the group. Ask for collaborators' input about what works and what facilitates analysis.

Facilitation Tips

- In the design of the practical measure, it will be important to consider measures that have been used in similar contexts in advance of the meeting.
- Be aware of how looking at the data may impact individuals and groups within your group. People who are intimately connected to the survey respondents or who were responsible for implementing the change, for instance, may find it difficult to look at less-than-perfect results. It's important to be attuned to the affective needs of the group, and to make space for people to acknowledge their feelings and offer one another support. It can be helpful to begin the process of analysis by inviting people to share their affective responses to the data, before interpreting them.
- Because this work may require a certain level of vulnerability, you may also want to discuss within the group the extent to which the data should be anonymous. For instance, is it necessary for the group to know whose classroom the data came from?
- When it is time to discuss the data, you may wish to remind the group that the data represents the thoughts, experiences, and opinions of real people and encourage the group to forefront the humanity of respondents over statistics or numbers within discussions.
- While the results from the practical measure help you to make informed decisions about revisions to the design and next steps, don't overlook the value of practical wisdom and experience. Collaborators and partners who are doing the work within context have valuable insights that might not always be captured in the results of the practical measure. You may decide to add a step that invites the group to reflect on what they noticed about the change idea and/or their experiences enacting the design in the field and take these reflections into account alongside the survey data when making adjustments.

Facilitator Preparation

MATERIALS

- [ ] Facilitator identifies measures in advance of the meeting, here is a template that can be used.

HANDOUTS OR SLIDES

- [ ] Facilitator identifies relevant survey items and adds them to the first column of the Tool for Creating Our Practical Measure table

Example from the field

A team of three high school language arts teachers and a researcher collaborated with the goal of creating more caring and inclusive classroom environments. To determine if the new daily routine they created made progress towards their goals, they developed a student survey as a practical measure. Every couple of weeks, teachers distributed the brief digital survey to students at the end of class to learn about students' experiences within their classrooms related to the new routine. Students spent 1-2 minutes completing the survey, agreeing or disagreeing with statements such as, "Today the routine made me feel like I matter in this classroom." The team then met to review and discuss the student survey data. Analyzing the practical measure data together provided opportunities for teachers to investigate their teaching practice and to problem-solve together as they worked toward the shared goal of cultivating caring classroom communities. The team used the data to determine modifications to the routine to support more caring and inclusive classrooms. In addition, the team refined the practical measure through revising, adding, or removing survey items based on their data discussions.

Additional Reading

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better.* Harvard Education Press.

Penuel, W. R., & Potvin, A. S. (2021). Design-Based Implementation Research to support inquiry learning. In C. Chinn, R. Duncan, S. Goldman, & M. Kapur (Eds.), International Handbook of Inquiry and Learning (pp. 74-87). Dordrecht, the Netherlands: Springer.

Penuel, W. R., Van Horne, K., Jacobs, J., & Turner, M. (2018).Developing a validity argument for practical measures of student experience in project-based science classrooms. Paper presented at the Annual Meeting of the American Educational Research Association, New York.

Penuel, W. R., & Watkins, D. A. (2019). Assessment to Promote Equity and Epistemic Justice: A Use-Case of a Research-Practice Partnership in Science Education. *The ANNALS of the American Academy of Political and Social Science,* 683(1), 201–216. https://doi.org/10.1177/0002716219843249

Potvin, A. S. (2021). "Students speaking to you": Teachers listen to student surveys to improve classroom environment. Learning Environments Research, 24, 239-252. https://doi.org/10.1007/s10984-020-09330-1

Takahashi, S., Jackson, K., Norman, J., Ing, M., & Krumm, A. (2022). *Measurement for Improvement.* In Peurach, D., Russell, J., Cohen-Vogel, L., & Penuel W. (Eds.), The Foundational Handbook on Improvement Research in Education. Rowman & Littlefield Publishers, Lanham, MD.

Yeager, D., Bryk, A., Muhich, J., Hausman, H., & Morales, L. (2013). *Practical measurement.* Retrieved from https://labs.la.utexas.edu/adrg/files/2013/12/Practical-Measurement.pdf of Political and Social Science, 683(1), 201–216. https://doi.org/10.1177/0002716219843249

Works Cited

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better.* Cambridge, MA: Harvard University Press.

Yeager, D., Bryk, A., Muhich, J., Hausman, H., & Morales, L. (2013). *Practical measurement.* Retrieved from https://labs.la.utexas.edu/adrg/files/2013/12/Practical-Measurement.pdf

Commitments to Equity and Wellness

Collaboratively designing research, curriculum, and shared experiences with an orientation towards equity necessitates procedures that can ensure that all voices are elevated, respected, and accounted for. Developing a practical measure collaboratively ensures that systems of iteration reflect the interests, needs, and perspectives of all partners. Distributing a practical measure, such as a survey, to people impacted by the design or change idea ensures that their experiences are centered in the design and iteration. Analyzing data collaboratively invites different perspectives and worldviews when making sense of data and translating results into action. This process provides an opportunity to cultivate care and community amongst the collaborators through attuning their affective experiences and relationships to the feedback being received.

EVALUATE AND ITERATE

Collaborative Field Notes

4 HOURS
(2 Sessions)

Authored by Erica Van Steenis & Ashley Potvin

*Adaptation Note: Field noting has been long used by researchers to collect data to produce meaning and understanding of cultural and social phenomena. This version of field note collaboration draws directly on the work of Cole (2014) and has been adapted across CU Boulder School of Education to support field based learning.

Activity Rationale and Aims

Aims

01.

Write field notes that capture key interactions and events as they relate to the team's research and/or design goals

02.

Share and discuss field notes to identify key themes and learnings to inform the research and/or design

Activity Summary

Field notes are detailed accounts of interactions that seek to distinguish low-inference observations and reflections of individuals' observations (Emerson et al., 1995). In this activity, collaborators will write their own field notes, which include: a) a brief summary of the interaction, b) a narrative description of the interaction, and c) reflection and analysis. Collaborators will then share and discuss their field notes.

Rationale

This activity aims to support building awareness of interactions that arise in context and to facilitate informed action in our communities. Writing field notes builds awareness of conditions that bring joy and pain in an individual's context. This practice can deepen one's ability to bring intention, awareness, and compassion to themselves and others (Potvin et al., 2022). Field notes are also a tool that educators and practitioners can use to develop justice-centered practices by noticing their experiences and interactions (Cole, 1996; Gutierrez & Vossoughi, 2010; Jurow et al., 2012). Field notes can support the process of building awareness of the deficit conceptions and biases we hold, through reflection.

In Person Steps

01.
Orient collaborators to the process of taking field notes.

a. Field notes are low inference descriptions of an event and/or interaction.

   i. Low inference notes describe what happened without drawing conclusions or making judgments.

b. Notes include descriptions of conversations, activities and interactions, participants, physical setting, and one's own thoughts.

c. Field notes intend to include low inference descriptions of phenomena that are directly observable. In contrast, high inference notes involve interpretations and include things that are not directly observable, such as assumptions and prescriptions of meaning. High inference notes can be included as reflections, after the narrative description.

02.
Review the Field Notes Template and identify the context where collaborators will take their field notes.

a. The context should be an interaction that involves collaborators directly or that they directly witnessed.

b. These events or experiences should focus on smaller snapshots of time (e.g., a 5-15 minute interaction).

03.
After taking field notes (this can happen between or during the session), work in pairs to exchange notes and discuss:

a. Have the author first share:

   i. What was the process of writing field notes like? Did anything feel challenging?
   ii. How easy was it for you to stay "low on the ladder of inference"?

b. After reading the field note and listening to the author share, the partner shares their responses to the following:

   i. How did you feel as you read?
   ii. What is there to celebrate about this set of field notes?

c. Invite partners to discuss:

   i. What connections did you see to [insert key constructs from your project]?
   ii. Did you find it difficult to stay low inference?

04.
Discuss key themes that arose with an eye towards how these insights can inform your work and learning together.

a. To do this exercise you may find it helpful to use a shared Google Document or another collaborative tool.

Modification Notes

- Instead of having collaborators write their field notes, they can record themselves via an audio recording.
- The field note template should be adapted to be specific to each project, particularly the prompts in the reflection and analysis portion of the template.

Facilitator Preparation

MATERIALS

- Computer or notepad to take field notes
- Example field notes

HANDOUTS OR SLIDES

- Field notes template

Facilitation Tips

- It is important that facilitators have experience with writing and using field notes.
- A useful approach is to have the group practice alongside the instructor/facilitator multiple times in advance of writing field notes independently.
- It is important to include sample notes to support learning how to do field notes.

Example from the field

In the co-design process that informed the development of the *Cultivating Compassion and Dignity in Ourselves and Our Schools* certificate, educators wrote field notes to develop awareness and cultivation of compassion as important and necessary components of effective leadership. The success of using collaborative field noting in the co-design process led the facilitators to incorporate field noting into the courses that comprise the certificate. Educator leaders in the courses participate in field noting as part of their summative assignments, across all three courses, writing two sets of field notes about interactions they had or witnessed that offered an opportunity for compassion. This summative assessment builds skills in writing field notes, understanding inferences, and developing awareness of pain points that arise at their schools.

Commitments to Equity

Collaborative field noting asks collaborators to notice their bodies, emotions, feelings, and interactions, all of which can play a role in recognizing the conditions that perpetuate inequality and oppression. The act of field noting can encourage collaborators to engage in a reflexive process that contributes to justice-centered actions. Field notes can support the process of building awareness of the deficit conceptions and biases we hold, through reflection. Moreover, the practice of attending on purpose and without judgment to one's environment, interactions, and experiences increases awareness of self and others and supports the conditions that enable practices of care and compassion.

Additional Reading

Potvin, A. S., Penuel, W. R., Dimidjian, S., & Jinpa, T. (under review). Supporting the development of skillful means in expressing compassion in schools through collaborative design. *Mindfulness*.

Van Steenis, E. (2021). Leveraging dilemmas as a pedagogical tool for novice youth worker learning. *Learning, Culture, and Social Interaction, 30,* 100522.

Works Cited

Cole, M. (1996). *Cultural psychology: A once and future discipline.* The Belknap Press of Harvard University Press.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes.* University of Chicago Press.

Gutiérrez, K. D., & Vossoughi, S. (2010). Lifting off the ground to return anew: Mediated praxis, transformative learning, and social design experiments. *Journal of Teacher Education,* 61(1-2), 100-117.

Jurow, A. S., Tracy, R., Hotchkiss, J. S., & Kirshner, B. (2012). Designing for the future: How the learning sciences can inform the trajectories of preservice teachers. *Journal of Teacher Education,* 63(2), 147-160.

Potvin, A. S., Penuel, W. R., Dimidjian, S., & Jinpa, T. (2022). Supporting the development of skillful means in expressing compassion in schools through collaborative design. *Mindfulness.* https://doi.org/10.1007/s12671-022-01867-x

Principled Improvisation

60-180 MINS

Authored by Susan Jurow, Bill Penuel, & Leah Peña Teeters

*Adaptation note: This activity is designed to be modified and adapted as it makes most sense in the context of design.

Activity Rationale and Aims

Aims

01.

To collaboratively identify explicit and implicit elements and structures of the designed activity

02.

To collaboratively imagine how to adapt certain elements and structures in a new setting

Rationale

Learning and development is contextually bound and socially situated. Practices that work in one setting may not work in another. Thus, when sharing collaboratively designed practices and processes across contexts, it is important to identify which elements of the practice are contextually bound and should be adapted (or discarded) for a new context and which (if any) are core practices tied to the theory of learning that could be applicable across settings. When sharing designed plans with other practitioners, it is helpful to consider: how can you give users a template that helps them understand how to modify the practices for their context? How can you label the activities to make more visible how and why activities work together and to what extent they are contextually bound and/or generalizable?

In Person Steps

01.

As a whole group, articulate the designed product's (e.g., intervention, curriculum) theory of learning and/or change. Discuss how that theory shows up in the designed product.

02.

Break the design team into small groups. Provide each group with a template of a collaboratively designed product, such as a lesson plan or protocol. Instruct the team to provide a high-level, bulleted outline of the "elements of a performance" (e.g., a lesson plan may have a warm-up, didactic instruction, collaborative work, and closing as well as strategies of questioning, scaffolding, relationship building).

03.

Building off of the musical performance metaphor, consider: What can be adapted and how and what should be preserved in its original form?

a. What are the activities that are central to support learning or behavior change? These activities can be thought of as "consistent activities" that need to be in place for the theory of learning/change to be actualized, regardless of context.
    i. For example, every performance may have the same instruments, and draw on a rehearsed series of songs. In the focal designed activity, consider what are the consistent elements? How does that map onto the theory of change?
    ii. In a designed activity, these activities may be activities that activate a theory of learning change.
b. What are the activities that are supporting the "consistent activities" and can be improvised upon?
    i. For example, a strong musical performance necessarily adapts to the venue and the audience. A strong band knows how to riff off of one another and adapt the rehearsed songs. In the research design, what are the places that necessitate "principled improvisation?"
    ii. In your template, identify which elements can/should be improvised. In a designed activity, this may be the learning scaffolds, discussion questions, medium of delivery, structure for building relationships, or modality of interaction.

05.

After identifying the elements and structures of the designed activity, engage in a whole group discussion:

a. Imagine a new setting and descriptively describe it (including collaborators, material resources, geographic location).
    i. How would you know how to adapt certain elements and structures based on the new setting?
    ii. Would the elements and structures work in another setting? What elements (i.e., infrastructure) need to be in place to support it?

Facilitator Preparation

MATERIALS

- Markers
- Handouts of focal design activity/protocol
- Chart paper
- Paper

Facilitation Tips

It is important to note that not all collaboratively designed materials are intended to be shared in other contexts and may be best left to evolve in the context in which they were developed.

Activity Summary

Hickey (2009) articulates how students find music through their own movements, singing and playing. As such, improvisation becomes a way of finding music for yourself and by yourself, a discovery rather than an imitation (Abramson, 1980, p. 62). This activity extends the metaphor of a musical performance, such as playing the blues, where there is a concrete structure as well as an integral element of improvisation, what one can think of as principled improvisation, or adaptation (Philip, 2019). Musicians carry elements of their performances across settings and also identify elements that are necessarily improvised as they assess the audience, venue, and context.

In this activity, collaborators will think about their designed product as a musical performance and first list out the structures of a specific "performance" and identify which structures will be consistent across contexts and which will be necessarily improvised. Collaborators will discuss processes for successful implementation and improvisation.

Commitments to Equity and Wellness

Sustaining designed research activity necessarily involves a reflexivity and flexibility to continue to adapt to the fluid nature of human activity. For designed activities to be culturally relevant, they need to be able to adapt to the social, cultural, and political context. Thus, it is important to make explicit how the different components of a designed activity interact with each other, making clear the activities and theories that undergird learning/development and the ways in which they can be adapted, modified, and re-mediated (Gutiérrez, Morales, & Martinez, 2009). Articulating the interactions of different design components makes visible the ways that designed activities can be adapted so as to attend to collaborators' experiences, emotions, and wellness.

Additional Reading

Jurow, A., & McFadden, L. (2011). Disciplined improvisation to extend young children's scientific thinking. In R. Sawyer (Ed.), *Structure and improvisation in creative teaching* (pp. 236-251). Cambridge University Press.

Kirshner, B., & Polman, J. L. (2013). Adaptation by design: A context-sensitive, dialogic approach to interventions. *National Society for the Study of Education Yearbook, 112(2), 215-236.*

Nicolopoulou, A., & Cole, M. (1993). Generation and transmission of shared knowledge in the culture of collaborative learning: The Fifth Dimension, its play-world, and its institutional contexts. In E.A. Forman, N. Minick, & C.A. Stone (Eds.), C*ontexts for learning: Sociocultural dynamics in children's development* (pp.283-314). Oxford University Press.

Works Cited

Abramson, R. M. (1980). Improvisation for K-8 students: Dalcroze-based improvisation. *Music Educators Journal*, 66(5), 62-62.

Gutiérrez, K. D., Morales, P. Z., & Martinez, D. C. (2009). Re-mediating literacy: Culture, difference, and learning for students from nondominant communities. *Review of Research in Education*, 33(1), 212-245.

Hickey, M. (2009). Can improvisation be 'taught'?: A call for free improvisation in our schools. *International Journal of Music Education,* 27(4), 285-299.

Philip, T. M. (2019). Principled improvisation to support novice teacher learning. *Teachers College Record* (1970), 121(6), 1.

Make Infrastructure Visible

TWO 45 MINUTE MEETINGS AT LEAST A WEEK APART

Authored by Susan Jurow, Bill Penuel, & Leah Peña Teeters

Activity Rationale and Aims

Aims

01.
To identify an artifact with your team that was designed collaboratively

02.
To make visible the diverse forms of activity that are involved in the successful implementation of the designed program

Activity Summary

This activity involves codifying the explicit and implicit and visible and invisible labor that surrounds one artifact. Collaborators will use a shared template to document the emotional, temporal, and physical infrastructure required to implement a focal activity. Once all collaborators have documented their activities, they will work together to generate a robust picture of the resources required to implement one activity.

Rationale

This activity draws upon the concept of articulation work, defined as the labor of coordinating or integrating different strands of work (see Strauss, 1985), and invisible labor, defined as work that is intangible and often unrecognized (see Jurow et al., 2016; Suchman, 1995). Taken together, the concepts of articulation work and (in)visible labor help to conceptualize how human activity is made possible by a constellation of factors, including explicit, implicit, tangible, and intangible factors. This activity seeks to support collaborators in making visible the emotional, temporal, and material infrastructure required to sustain projects.

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In Person Steps

WHOLE GROUP PREWORK:

01.
Identify an artifact that was designed collaboratively (for example: an app, an evaluation tool, a lesson plan, a mentoring guide, etc.).

02.
Ask collaborators to first engage with focal ideas via writing. Introduce the concept by asking collaborators to respond to the prompt: "What conditions had to come together for this [the identified artifact] to come to be?" Once that is addressed, then ask collaborators to write on: "And what conditions had to come together for THAT to come to be?" and so on.

a. Have collaborators write for 10 minutes in response to this repetitive prompt intended to develop multiple layers of a story.
    i. Encourage collaborators to write their story from an "I perspective."
b. Share out, identifying contradictions and tensions.

INDIVIDUAL "TAKE HOME" ACTIVITY:

01.
Identify a week-long period where the selected artifact will be used. During the week of implementation or use, have collaborators create digital journals where collaborators can keep notes of their interactions with the artifact.

c. Interactions consist of activities such as time thinking about the artifact, noticing feelings related to the artifact, conversations about the artifact, making adaptations to the artifact, work on the artifact.

WHOLE GROUP

02.
After one week of documenting, dedicate a meeting to sharing out the work that was involved in implementing the collaboratively designed artifact.

03.
Create a summary document of resources required, including time (e.g. time required to prepare, implement, build and maintain necessary relationships), emotional (e.g. time to process, skills to hold and navigate heavy emotions as a group), and material (e.g. physical resources).

04.
Discuss what infrastructure needs to be designed and maintained to sustain this work.

Modification Notes

- The team can modify the journal template to meet the needs of their specific project.
- To further address how power shapes in/visibility, the team should identify an artifact/reading that addresses how power is at play. As part of step 3, add a column in the journal for addressing how power shapes in/visibility or the lack thereof in the artifact/reading.

Facilitator Preparation

HANDOUTS OR SLIDES

- Journal template

Facilitation Tips

Engage in shared readings (see additional readings below) so that the team understands the importance of naming the various resources involved in implementation. Discuss concepts such as emotional labor, attending to the ways that people with different racialized and gendered identities have different relationships to emotional labor.

Example from the field

In a partnership between a local community organization and education researchers, collaborators worked together to understand the professional practices of community health workers known as *promotoras*. The *promotora* model engages community members as liaisons between the organization and local residents. The initial focus of this research collaboration was to document the practices of the *promotora* model to understand its success. This was important to the organization as they considered training new *promotoras* and scaling the model. The research collaboration was thus oriented around understanding the *promotora* model and co-designing resources that could support a cycle of learning. The following excerpt from Jurow et al. (2016, p. 211) describes how the visible work of the *promotoras* consisted of tending gardens. The less visible — yet fundamental — work of developing relationships of care with neighborhood residents was often unseen:

> *In 2014, Impact's gardens produced 30,000 pounds of fruits and vegetables. The neighborhood now has 300 gardens and a waitlist with over 100 residents who want an Impact garden, which includes an irrigation system, seeds, seedlings, and the support of a promotora throughout the growing and harvesting season. As a result of Impact's success, backyard garden participants will have the option to sell their produce to the city's first community-run food cooperative, for which Impact has secured funding and a physical space in the neighborhood. These efforts have not only increased residents' access to healthy foods, but they have also expanded the broader movement for food access and social justice within the city. Impact is now creating innovative forms of community infra-*

Example from the field (cont.)

structure to address the systemic issue of food deserts in a community-generated and beneficial way.

These highly visible transformations in the neighborhood are grounded in the less heralded work that the promotoras do to cultivate thriving vegetable gardens and a sense of community among residents. Promotoras design, prepare, and maintain gardens in backyards with residents, some of whom have never grown vegetables and others who have a wealth of experience with farming. The success of the gardens is key to the social relationships that the promotoras have been able to develop with residents. Significantly, it is the promotoras who handle on-the-spot contingencies in the gardens. For instance, when an irrigation hose breaks or tomatoes become infested with a plague, they manage the complaints of irritated garden participants, as one of the promotoras put it, "always with a smile" to represent the goodwill of Impact and its commitment to the neighborhood (see also Hochschild, 1983). Another dimension of the promotoras' work is that they have come to serve as confidants and advocates for residents. The sustained relationships they have developed with residents through growing vegetables with them, returning season after season, and learning about their lives have given them unique access to the private and the collective experiences of community members. Working across hundreds of gardens, this small team of promotoras has learned about the challenges facing many of the neighborhood's residents: access to health care, education, legal services, and concerns with addressing and preventing violence against women. The gardening and relational work has been intertwined, and in fact symbiotic, as promotoras' relationships with community members are rooted in their effectiveness as gardeners. (Jurow et al., 2016, pp. 211)

Naming the invisible work (emotional, temporal, and physical) of the *promotoras* had critical implications for understanding the success of the model, promoting equity within the organization, building processes by which to sustain the work, as well as for considering what would be involved if the organization were to implement a similar model in other contexts. Before engaging in work to document the different types of labor in which the *promotoras* engaged, the official description of their work was that of tending the gardens. However, via diligent documentation and observation, it became clear that the success of the model, and thus the organization, was due to the less visible work involved in cultivating and responding to the relational and emotional needs of the community.

Commitments to Equity

"What is seen and what is invisible, to whom and why, helps researchers understand what matters in an organization and whose perspective is valued" (Jurow et al., 2016, p. 218). Making diverse forms of labor visible is critical in generating equity-oriented practices. Articulating the diversity of work entailed within a focal practice can support an "ecological understanding of workplaces, materiality, and interaction" and can surface issues of justice and injustice (Star, 1999, p. 379). All too often, what gets counted as labor is prescribed by white, patriarchal norms. All too often, the emotional labor of care and mentorship falls upon people of color and female-identifying bodies. Obscuring the relational and emotional labor that is critical to the success of particular practices puts an undue burden on team members of non-dominant identity statuses, while simultaneously resulting in practices of compensation that do not account for this work.

Clearly defining the work involved in sustaining focal practices and projects allows for the appropriate allocation of resources, potentially minimizing the risk for undue stress caused by unanticipated challenges of implementation. Having a clear understanding of the work involved in implementing and sustaining particular practices and forms of participation can support the generation of structural systems that can support the promotion of the wellbeing for all team members.

Additional Reading

Ahn, J., Van Steenis, E., & Penuel, W. R. (in press). Centering work to organize community-engaged research. In D. Peurach, J. Russell, L. Cohen-Vogel, W. R. Penuel, & D. Eddy-Spicer, (Eds), *Handbook of improvement research in education.* Routledge.

Marin, A., Stewart-Ambo, T., McDaid-Morgan, N., White Eyes, R., & Bang, M. (2020). Enacting relationships of kinship and care in educational and research settings. In A. I. Ali & T. McCarty (Eds.), *Critical youth research in education: Methodologies and praxis* (pp. 243-264). Routledge.

Orr, J. E., & Crowfoot, N. C. (1992). *Design by Anecdote -The use of ethnography to guide the application of technology to practice.* PDC.

Orr, J. E. (1990). Sharing knowledge, celebrating identity: War stories and community memory in a service culture. In D. Middleton & D. Edwards (Eds.), *Collective remembering: Memory in society* (pp. 169-189). Sage.

Penuel, W. R. (2019) Infrastructuring as a practice of design-based research for supporting and studying equitable implementation and sustainability of innovations. *Journal of the Learning Sciences,* 28(4-5), 659-677.

Star, S. L., & Strauss, A. (1999). Layers of silence, arenas of voice: The ecology of visible and invisible work. *Computer Supported Cooperative Work* (CSCW), 8(1–2), 9–30.

Works Cited

Jurow, A. S., Teeters, L., Shea, M., & Van Steenis, E. (2016). Extending the consequentiality of "invisible work" in the food justice movement. *Cognition and Instruction*, 34(3), 210-221.

Star, S. L. (1999). The ethnography of infrastructure. *The American Behavioral Scientist (Beverly Hills),* 43(3), 377-391.

Strauss, A. (1985). Work and the division of labor. *Sociological Quarterly,* 26(1), 1-19.

Suchman, L. (1995). Making work visible. *Communications of the ACM*, 38(9), 56-64.

Guidelines to Implement in Local Contexts

ONGOING

Authored by Susan Jurow, Bill Penuel, & Leah Peña Teeters

Modifications and Virtual Adaptations: These guidelines are intended to be modified and adapted as it makes most sense in the context of design. They are a starting point and should be expanded upon by the team.

Activity Rationale and Aims

Aims

01.
Build and sustain trusted teams and relationships

02.
Consider local contexts and implications for implementation

Activity Summary

These are guiding principles that are not comprehensive, nor intended as a “step by step” but rather a starting place for reflection. When collaborators are considering implementing a research design in a new context, it is important to engage anew in the process of building trusted teams and identifying and understanding. It is also important to revisit goals and practices of assessment and evaluation.

Rationale

Implementing research in new contexts presents great opportunities to share learning across contexts. However, research and design work is socially and contextually bound, and thus when teams are considering implementing work in a new context, it is important to learn about and adapt to localized knowledge systems (Zavala, 2013). This resource provides a few guiding principles to help teams begin to ask questions and engage in activities that can support the research to be adapted to local contexts in meaningful and culturally appropriate ways.

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Guidelines

01.
Consider the nature of the collaboration and the power dynamics. Questions should be asked about:

a. Who initiated the collaboration?
b. What need is it addressing?
c. How have those needs been assessed?

02.
Engage anew in activities of building trusted teams and identifying and understanding the context.

03.
Make the theory of change visible (see "Make Infrastructure Visible" and " Principled Improvision ").

04.
Identify the values and visions of the audience of implementation. Work within the new context to adapt activities to align with the local values and visions.

a. The team can draw on the idea of mutual appropriation where the design outcomes are negotiated amongst collaborators over time, as articulated by Jurow and Freeman (2020, p. 725): "As designers working toward equity, we must hold lightly onto our designs, be willing to let go of features that no longer serve our goals and develop new approaches that can help us achieve them." This involves holding central community perspectives and adapting to align the design work with the community's desires, perspectives, and values.

Example from the field

The Fifth Dimension program is an example of a designed program and research study that has developed into a network of afterschool programs that connect school children to undergraduates from local colleges and universities (Cole & The Distributed Literacy Consortium, 2006). The shared activity emphasizes learning, play, and peer interaction. Researchers and educators have implemented the Fifth Dimension model nationwide, connecting undergraduates and school-aged children and emphasizing learning, play, and interaction. These guiding principles have then been adapted in response to local contexts.

Jurow and Freeman (2020) write about an example of a local adaptation of a Fifth Dimension club, EPIC. The design narrative presented in Jurow and Freeman (2020) showcases the importance of adapting programs time and again not only in response to the local context, but in response to political climates and local and national events. Jurow and Freeman (2020) detail the process of how they "systematically and concretely adapted the design of EPIC for children and pre-service teachers to respond to the increasingly explicit racism in US political discourse that fueled Trump's election and coinciding forms of evading race" (p. 711). This article provides an example of how sustaining research and designed programs involves a continual cycle of renewing the design.

Commitments to Equity

When bringing research and design processes to new contexts, it is imperative to bring humility and openness to the process. There is a risk that processes, programs, and tools designed in other contexts may not fit or may need to be dramatically revised to meet the needs of local cultures and geographies. Engaging in activities previously conducted in the original setting, such as understanding the context, exploring values, and building trust, will be extremely important so as to mitigate the risk of undermining local knowledge systems and value structures.

Supporting communities to thrive necessitates an understanding of the practices, values, and visions of local communities and then adapting research practices to extend existing practices, align with values, and work towards the communities' visions. Doing this centers care and reciprocity.

Additional Reading

Bell, P. (2004). On the theoretical breadth of design-based research in education. Educational Psychologist, 39(4), 243–253.

Downing-Wilson, D., Lecusay, R., & Cole, M. (2011). Design experimentation and mutual appropriation: Two strategies for university/ collaborative after-school interventions. Theory & Psychology, 21(5), 656-680.

Gutiérrez, K. D., Morales, P. Z. & Martinez, D.C. (2009). Re-mediating literacy: culture, difference, and learning for students from nondominant communities. Review of Research in Education, 33(1), 212-245.

Lather, P. (1986). Issues of validity in openly ideological research: Between a rock and a soft place. Interchange, 17(4), 63-84.

Tuck, E. & McKenzie, M. (2015). Relational validity and the “where” of inquiry: Place and land in qualitative research. Qualitative Inquiry, 21(7), 633-638.

Works Cited

Cole, M. and The Distributed Literacy Consortium (2006). The Fifth Dimension: An after-school program built on diversity. Russell Sage.

Jurow, A. S. & Freeman, Q. (2020). Re-mediating designs for equity: Making commitments concrete. Information and Learning Science, 121(9/10), 711-728.

Zavala, M. (2013). What do we mean by decolonizing research strategies? Lessons from decolonizing, Indigenous research projects in New Zealand and Latin America. Decolonization: Indigeneity, Education & Society, 2(1), 55–71.