

ELIZABETH K. BRIODY, PhD FOUNDER AND PRINCIPAL 

Cultural Keys LLC

FREDY RODRÍGUEZ-MEJÍA, PhD POST-DOCTORAL ASSOCIATE RESEARCHER 

Purdue University(E-mail: fredyrafaelrodriguez@gmail.com)

JULIA KING, BS DIRECTOR, OFFICE OF INDUSTRIAL EXPERIENCE; DIRECTOR OF ADMINISTRATIVE SERVICES.
SCHOOL OF MECHANICAL ENGINEERING.

Purdue University(E-mail: juliaking@purdue.edu)

EDWARD BERGER, PhD PROFESSOR, ENGINEERING EDUCATION AND PROFESSOR, MECHANICAL ENGINEERING;
DIRECTOR OF MEERCAT PURDUE: THE MECHANICAL ENGINEERING EDUCATION RESEARCH CENTER ATPURDUE UNIVERSITY 

Purdue University(E-mail: bergere@purdue.edu)

Understanding Culture Through Pictures and a Thousand Words

As the adage goes, a picture is worth a thousand words. Yet, anthropologists have not typically sought study-participant drawings. Using a protocol in which a request for a drawing was embedded, this study captures the internal dynamics of three successful university-based teams. Our questions followed a specific Describe–Draw–Explain sequence. All interviewees offered some novel element in their drawings (Draw step) beyond what they conveyed in their verbal descriptions (Describe step), while 85 percent of them again offered additional detail in the Explain step. The data also revealed stark and surprising cultural contrasts across teams, including one that was understood best as a network that could be activated upon demand. Gathering drawings is a fast yet valid and reliable method when the prescribed sequence of questions is followed. Another virtue of this approach is that the interviews can be conducted virtually, essential during the COVID-19 era. [study-participant drawings, Describe–Draw–Explain sequence, team dynamics]

Introduction

As the adage goes, a picture is worth a thousand words. We know generally what the saying suggests: the picture encapsulates pages of text. In a glance, it is possible to grasp and make sense of the general meaning behind the words. The picture or drawing lays bare the core significance of the writer's goals and objectives. It becomes a way for the viewer to perceive and comprehend essential aspects and/or implications of what the writer has stated. The drawing also serves as a heuristic device helpful in recall, analysis, and telling the broader story.

Of course, focusing solely on the picture would be ill advised for anthropologists. Our ethnographic training emphasizes a mix of methods to capture insider perspectives and behavior (Fetterman 2020; LeCompte and Schensul 2010). Anthropologists aspire to gain as holistic an understanding of a cultural group as possible, triangulating methods and sources of data, as well as the viewpoints of research team members and applicable published works (Bernard, Wutich, and Ryan 2017). So, what if we were to examine one or more drawings in relationship to discourse surrounding them? And what if those drawings were neither sketches from the field by an anthropologist (Taussig 2011; Causey 2017) nor data displays based on the anthropologist's analysis (LeCompte and Schensul 2013), but rather drawings by study participants?

A member of our research group experimented with study-participant drawings in two prior projects. Motivated by her clients' favorable reactions, we intentionally integrated study-participant drawings into our study of three grassroots teams. We wanted to test the assertion that drawings and discourse would yield distinctive findings and produce robust cultural insights.

ANNALS OF ANTHROPOLOGICAL PRACTICE, Vol. 00, No. 0, pp. 1–17,
ISSN 0094-0496, online
ISSN 1548-1425. © 2021 by the American Anthropological Association. All
rights reserved.
DOI: 10.1111/napa.12157

A secondary goal focused on the role of team dynamics. The three teams were part of a larger set of 12 grassroots teams created in the Engineering School (ES) of a large, public, midwestern university in the United States. All 12 teams were assembled to address issues that team members cared about and which had an effect on student outcomes. Yet, only the three discussed in this article were successful, that is, they “institutionalized” their innovations, getting their changes incorporated into ES or university practices, processes, and policies (Rodríguez-Mejía et al. 2020). We wondered how important team dynamics were to successful team outcomes.

Literature Review

What Is Drawing?

A common definition of drawing is the “art or technique of representing an object or outlining a figure, plan, or sketch by means of lines” (<https://www.merriam-webster.com/dictionary/drawing>, accessed August 26, 2020). Anthropologists are particularly interested in the meaning behind what a drawing and the act of drawing represent—both to them and to others. Consequently, anthropologists have defined drawing in a variety of ways. For example, drawing is considered a “depicting” (Taussig 2011, xii) or a record that “acts as a witness, a visual testament to the ‘I was there’” (Hendrickson 2019, 200). Anthropologists are increasingly emphasizing drawing as ethnographic data and as integral to fieldwork, with the goal of drawing “in order to see” (Causey 2017, 15). Indeed, Morton (2018) uses the phrase “graphicalization of description” to convey what the anthropologist has observed in the field. Drawing or sketching also has been defined as a “form of (visual) thinking” (Geismar 2014, 99) or as a “process of thinking” or “way of telling” (Ingold 2013, 128, 125).

Anthropological Use of Drawing in

Historical Context

When anthropology was in its infancy, anthropologist drawings underscored the value of capturing aspects of culture as an early ethnographic technique. Important insights pertained to analyses of fieldwork sketches by anthropologists in the mid-1920s. Morton (2018), exploring the images made by Henry Balfour, sought to understand the use

of visual data including drawings in field journals, those based on direct observation, and those drawn in conjunction with photography. He argues both that the process of drawing “enfolds within itself important fieldwork temporalities and practices of looking, observing, positioning, engaging and interrogating the world” (2018, 19, 23) and that drawings represent “visual evidence.” The archives of Arthur Bernard Deacon, as examined by Geismar (2014), also suggest a strong empirical focus. For example, Deacon drew “as a way to locate himself...within a specific environment” (Geismar 2014, 106), as he illustrated aspects of a culture that were in the process of disappearing.

Particularly since the start of the 20th century, anthropologists in the field also have collected native drawings (cf. Soukup 2014, 537). They tended to seek out children’s drawings to permit an understanding of child development and socialization processes (Soukup 2014). The virtues of drawing as a data collection method include its typically nonthreatening nature, that it does not necessitate verbal or written communication, and that it can be used in cross-cultural comparisons since it “can avoid some of the difficulties of translation” (Merriman and Guerin 2006, 48). Anthropologists today continue to collect and analyze children’s drawings (cf. Johnson, Pfister, and Vindrola-Pardos 2012, 166), with some issuing words of warning. Oversight by adults (Mitchell 2006) and expectations to conform to dominant ideologies (Strassler 2006) can affect what children draw and whether their artwork is affirmed and recognized. When children’s views are gathered along with their artwork, distinctive details can emerge from each source (Johnson, Pfister, and Vindrola-Pardos 2012).

With the rise in photography’s popularity, drawing largely lost its relevance as a tool in the field. A number of anthropologists concluded that study-participant drawings were “too subjective” and created analytical and interpretation challenges (Soukup 2014, 543). Indeed, in the latter part of the 19th century, anthropologists largely abandoned study-participant drawings in favor of photography that was considered “unbiased and reliable” (Soukup 2014, 534). Similarly, Afonso (2004, 72, 74) noted that film and photography were the “privileged forms of visual representation” while drawing was considered too “handicrafty.” These assessments are consistent with the devaluing of visual media (e.g., drawings, photographs) over time—in

favor of text-only publications (Geismar 2014; Ingold 2016).

Some Resurgence of the Visual

Design anthropologists routinely use “cultural probes,” artifacts “designed to provoke inspirational responses” (Gaver, Dunne, and Pacenti 1999, 22), when engaged in project work with designers, users, clients, and customers. Items such as postcards, posters, maps, and mock-ups serve as “things-to-think with” as all parties converse and contribute their ideas to arrive at some consensus (Brandt 2007, 185). Such cultural probes, like drawings, elicit knowledge and perspectives. The two media exhibit a key similarity: both serve as a means to an end. The cultural probe assists the design anthropologist in arriving at a design or product while the drawing contributes data to the field-based anthropologist’s understanding and explanation of a given culture or cultural pattern.

A number of 21st century anthropologists have created drawings during fieldwork. Taussig (2011, 13) believes that “In pointing away from the real, (drawings) capture something invisible and auratic that makes the thing depicted worth depicting.” Causey (2017, 3) views drawing as another option “for collecting, recording and presenting ethnographic information.” Similarly, Kuschnir (2016) identifies 11 potential benefits of drawing including helping anthropologists record and discuss memories” (118), “document not only visual information, but also abstract concepts” (123), and “generate dialogue and collaborative research” (126).

Others have used drawings to elicit cultural insights. Johnson, Pfister, and Vindrola-Pardos (2012) successfully gathered children’s drawings of their experiences with oncology treatments but failed to convince the children’s parents to draw since parents considered drawing a child’s activity. Relying on psychological principles, Edgar (2004) introduced “imagework” methods to generate perceptions of identity. He asked students to imagine a situation they were experiencing, draw a picture of the situation, post it on the wall, and talk about their sketch; he then conducted an analysis of what he saw and heard. Afonso (2004) asked an anthropologist-illustrator to draw some past village activities and old objects. When showing the sketches to study participants, she obtained greater detail about the past and clarity surrounding cultural change.

Missing from this growing literature are study-participant drawings made by adults. Apart from the difficulty that Vindrola-Pardos encountered in getting parents to produce drawings on their children’s hospital treatments (Johnson, Pfister, and Vindrola-Pardos 2012), we wondered why study-participant drawings have not routinely been incorporated into anthropologist research designs. In our view, study-participant drawings are an untapped resource. We believe that when such visual methods are integral to an anthropological study, they have the potential to complement other data (e.g., verbal, written) and provide a more complete, accurate, and holistic understanding of the research. Thus, we frame our research questions in this way:

- What is gained methodologically by integrating drawing with discourse during the interview process?
- How do we know that requesting drawings from study participants adds cultural value to an interview?

Data and Methods

Our research is part of a larger five-year study of organizational-culture change employing an ethnographic approach that includes interviews, observation, focus groups, surveys, and documentary sources. To this rich data set we now add study-participant drawings. All names in the text and drawings are pseudonyms to protect confidentiality. We secured IRB approval and all interviewees consented.

Collecting Interviewee Statements and Drawings

Our study participants were associated with three successful teams in the ES: Flex Co-Op, Mentorship, and Intercultural Competency. We engaged all key team members by phone in January 2020. Our discussions with these 20 team members were brief, lasting 21 minutes on average; Intercultural Competency’s interviews were about 5 minutes longer since we knew less about their work (see Table 1). The vast majority of team members consisted of university staff—with the exception of Flex Co-Op, which had two faculty members and one student, and Mentorship, which also had a student.

TABLE 1. Data Collection Attributes by Grassroots Team

	Flex Co-Op	Mentorship	Intercultural Competency	Total
Number of interviews	8	6	6	20
Average duration (in minutes)	18.9	17.8	25.5	20.7
Number of drawings	8	6	6	20

We began our targeted protocol by inquiring about study-participant roles on the particular team. Next, we asked interviewees to talk about how their team members worked together. We pointed out that we were interested in the team’s internal interactions including those aspects of teaming that worked particularly well and those that did not. Next, we asked study participants to draw a picture of those team interactions. This request was often met by laughter and a comment such as “I am not a very good artist.” We did our best to reassure them that we were not looking for artistic excellence, but rather a conceptualization of team interactions; all completed a drawing in about one minute. Once the sketch was finished, we encouraged study participants to explain their drawings.

Analyzing the Describe–Draw–Explain Sequence

Two of us independently conducted analyses of the data. First, we completed a content analysis of themes and patterns emerging from the initial study-participant statements about team dynamics (Bernard, Wutich, and Ryan 2017; LeCompte and Schensul 2013). In this *Describe* step, we examined the data for each of the three teams separately. In the *Draw* step, our attention shifted to the 20 drawings. We conducted a visual analysis of the drawings by team to distinguish salient patterns. We also compared each study-participant’s drawing to that individual’s initial description. Finally, in the *Explain* step, we compared study-participant explanations of their drawings with their initial descriptions of team dynamics. Our goal in conducting this three-step analysis was to identify any new insights generated solely through the drawings and separately, the explanations of the drawings. Finally, the two of us compared our independent analyses, reconciling any differences.

Background

Between 2016 and 2017, our research group convened 12 small teams, referring to them as grassroots teams since they were composed of individuals from “loosely connected networks” who held diverse university roles (Morrison et al. 2019, xxi). Participants chose from an array of possible team topics, joining voluntarily. We used “Strategic Doing,” a guided approach involving “Teaching people how to form collaborations quickly, move them toward measurable outcomes and make adjustments along the way” (<https://strategicdoing.net>, accessed February 19, 2020). The three teams launched with committed and “excited” team members (see Table 2), implemented pilots in Spring 2018, and continued brainstorming and testing new ideas through 2019. In this article, we present team-member perspectives gathered after the teams successfully accomplished their initial goals.

Study-Participant Descriptions of Team Dynamics

Our analysis closely parallels the sequence of interview questions. We begin with the responses that interviewees provided at the outset of their interviews in which we asked about their role on their team and how their team worked together.

Collaboration

In the Describe step, the content analysis of internal team dynamics revealed a number of team-member statements about collaboration. Flex Co-Op participants talked about the extent of “engagement,” “sharing openly,” “nonjudgmental listening,” and “trust and respect” on their team. One faculty member noted, “Even though there’s kind of a power

TABLE 2. Selected Grassroots Team Characteristics (Fall 2017)

	Team focus	Number of scheduled meetings	Average number of participants
Flex Co-Op	Increase the number of students who participate in Co-Op and their completion rate	7	9
Mentorship	Expose students to additional mentors who can help them grow professionally and offer advice tailored to their specific career interests	5	7
Intercultural Competency	Assess students' intercultural competencies during their 2nd and 4th years at university	4	3

differential in different members of the committee (i.e., students, faculty and staff). I think everybody felt like they were kind of on the same level and they could freely express their feelings." Collaboration appeared in the flow of ideas expressed by Mentorship team members. For example, the student member described interactions this way: "...ideas circulating around the table...It's very much a (sic) iterative process." Intercultural Competency also benefited from cooperative engagement, though it was largely one-on-one with the team leader. One individual remarked, "I primarily worked with Marc...(and) of course, his TAs (teaching assistants) that I trained." Another team member mentioned, "I've worked with Marc and I've worked with others, like Hannah for example, in different ways, but I don't know if we've had a formal committee meeting. Is there a formal committee?" Such statements were the first indication that Intercultural Competency was structured differently compared with Flex Co-Op and Mentorship.

Leadership

Themes related to leadership were prominent. In Flex Co-Op, leadership guidance appeared in the behavior of the team convener (i.e., a content expert) and the facilitator. The team leader, aware of her powerful role, preferred a consensus-oriented rather than directive approach: "We had a combination of facilitators because I specifically didn't want to lead that team because I had a very strong opinion on what direction we should go (in) and

I wanted to have everybody speak openly." Other team members commented that the facilitator "kept the conversation going" and "kept us on track." Leadership persistence was exhibited repeatedly in Mentorship where there was "a commitment to not fail." During its first year, the team experienced high turnover due to technology setbacks. Nevertheless, core team members "didn't give up." The team leader reported, "I felt like it was too important to not implement, and we had to find a way." Another stated, "The team leader...made sure that we were reviewing our action items and making progress. And when we weren't making progress, she would help hold us accountable." Mentorship refreshed its membership through new student representatives. In Intercultural Competency, leadership was not a salient theme.

Diversity of Input

The theme of diversity of input featured prominently. A Flex Co-Op team member stated: "I was coming in as a disruptor of tradition but...I wanted to make sure that everything that I was disrupting was not destroying the good (in the existing)...program." Another played the role of "devil's advocate" contributing "a spark to some of the conversation because of...[her] opinions." Yet, it was clear that the team's goal was to "converge," "coming to consensus, coming to an agreement" on the Co-Op Program's future. Mentorship's diverse input was largely the result of occupational experiences: "(The team) really brings a good blend of different

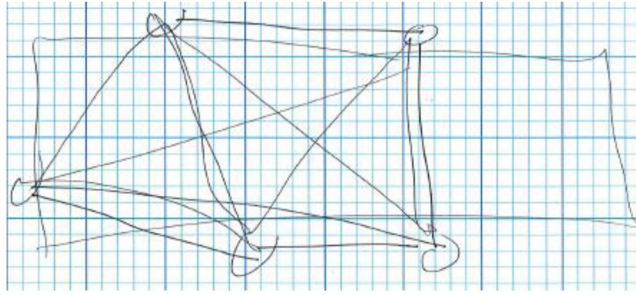


FIGURE 1. Cross-communication among team members.

skill sets, different perspectives so that we make sure we can serve all the students and not just a certain sector of students.” By contrast, Intercultural Competency benefited from diverse input primarily as a function of expert knowledge: “Each of us specializes in some aspect (of intercultural learning).” University staff from certain complementary areas were assembled from time to time: “We worked on many of our own initiatives and worked together when our paths collided, so to speak.” This emphasis on specialization appeared to be time-limited as indicated in this statement: “I told Marc even like whenever he would want to meet again or something, let me know.” Such statements set Intercultural Competency apart from both Flex Co-Op and Mentorship.

Study-Participant Drawings of Team Dynamics

Visual Analysis of the Drawings

In this first analysis, we assembled the drawings to see if common attributes emerged within the teams. Six of the eight Flex Co-Op drawings suggest engagement in an activity involving a small group. Team members are illustrated together—physically proximate—in a particular space such as seated around a table. In two drawings, lines or arrows represent visible indicators of the exchange of ideas and information during meetings (see Fig. 1). Mentorship exhibited the same pattern with five of the six team members depicted in a circular pattern, three of which incorporated arrows between team members (see Fig. 2).

The role of leadership was evident in four of the eight Flex Co-Op drawings. In three of these cases, leaders take the head position at the table or are illustrated standing and speaking to

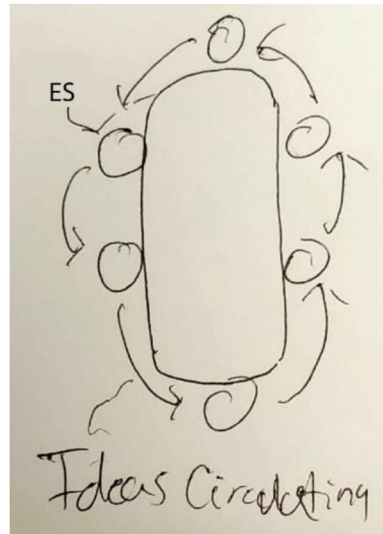


FIGURE 2. Arrows symbolizing the circulation of ideas.

the team (see Fig. 3). In the fourth drawing, the leaders are shown in the top two positions on an organizational chart reflecting the team’s composition. Mentorship revealed a similar arrangement with leaders highlighted in four of the six cases.

Notable about three of the Mentorship and one of the Flex Co-Op drawings was the sense of action at the meetings. In one drawing, the combination of key concepts (e.g., “ideas,” “goals”) depicted on the table, around which named team members are seated and connected by double-sided arrows, suggests movement and activity in process (see Fig. 4). All four drawings seem to invite the viewer into the scene. Arrows appear in these drawings emphasizing flow of information or team-member interaction.



FIGURE 3. Leader centrality during team meetings.

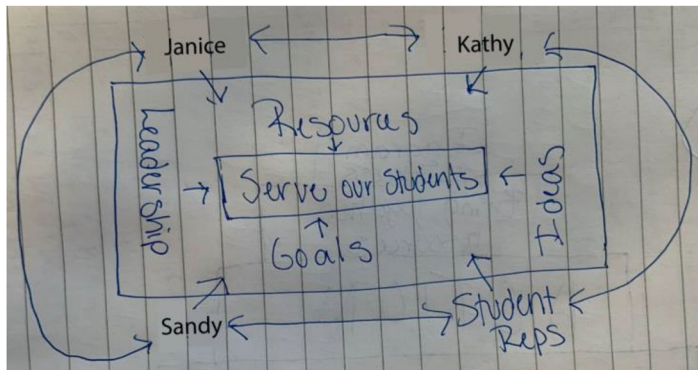


FIGURE 4. Ongoing team activity in addressing team goals.

The Intercultural Competency drawings have few of the features found in Flex Co-Op and Mentorship drawings. No shared meeting setting is portrayed. Team members are not referenced by their names or initials on the drawings, though in two of the six cases, their organizations are named (see Fig. 5). Generally, the Intercultural Competency drawings are nonspecific to the team's work. Thus, the visual analysis of the drawings, like the content analysis of the descriptions, demonstrates a number of shared attributes held by the Flex Co-Op and Mentorship teams. By contrast, Intercultural Competency drawings can be distinguished by the extent of abstraction they display.

Draw-Describe Comparisons

In our second drawing analysis, we explored the relationship between the Draw and Describe steps, comparing the drawings with initial verbal descriptions. Remarkably, all interviewees offered some novel element in their drawings beyond what they conveyed in their verbal descriptions. These value-added features can be categorized into two types: those adding detail or specificity and those representing general concepts or a symbol (see Table 3). Taken together, these features crossed every team.

One category, *feature specificity* ($N = 14$), pertains to the addition of new details that the drawing offers. For example, several study participants illustrated the setting where the team meetings

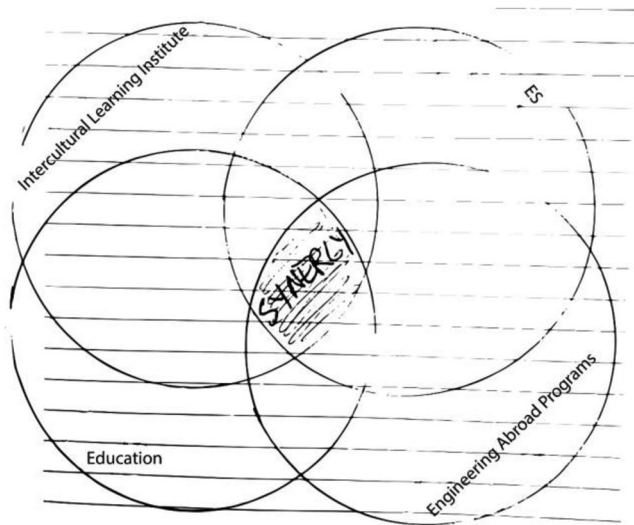


FIGURE 5. Synergistic efforts from four participating organizations.

TABLE 3. Specificity vs. Generality in Drawings

	Flex Co-Op	Mentorship	Intercultural Competency	Total
Feature specificity	6	6	2	14
Feature generality	2	0	4	6
Total	8	6	6	20

occurred; these drawings typically showed team members around a conference table. Others introduced one or more new team-member details (e.g., name or number of team members, leadership role) that were not previously mentioned (see Fig. 6). Still others named either the team members or the university organizations with which they were affiliated.

A second smaller category among the drawings, *feature generality* ($N = 6$), reflects the usage of abstract symbols and shapes with no identifiable team characteristics (see Table 3). For example, two Intercultural Competency study participants used recognizable symbols (e.g., infinity, dreamcatcher) while two others depicted an arrangement of circles and lines or arrows to convey team dynamics (see Fig. 7). This same pattern was evident in Flex Co-Op where one interviewee drew a yin yang symbol and the other a series of connected shapes. Despite the generalized nature of these six drawings, we know that the drawings hold meaning for the inter-

viewees or they would not have drawn them. For clarification, we just have to wait until the Explain step.

Table 3 suggests differences in the drawings created by Intercultural Competency compared to the other two teams. In particular, Intercultural Competency drawings appear to be general depictions while those of Flex Co-Op and Mentorship appear to be specific, even personalized. This pattern is consistent with the descriptions of team dynamics provided by all interviewees (Describe step). Moreover, even when we examine the two Intercultural Competency drawings categorized as specific (because they contained identifiable team features), those features are more general than those of their counterparts on the other two teams. Both drawings represent Venn diagrams of overlapping organizations contributing to Intercultural Competency's work (as in Fig. 5), rather than the specific, named individual team members that appear in the Flex Co-Op and Mentorship drawings. As a result, we

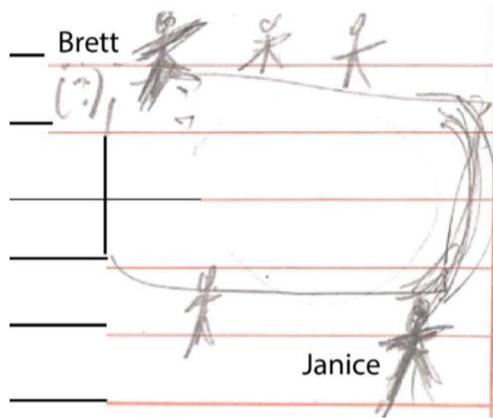


FIGURE 6. Emergence of new team-member details including a key technical expert.

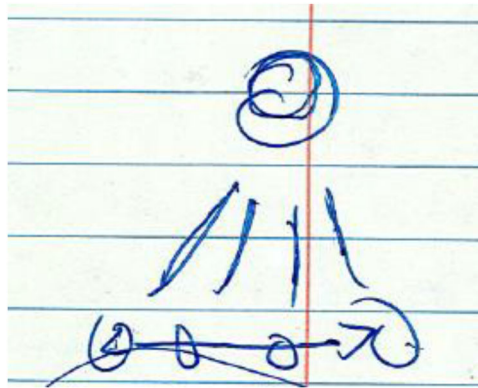


FIGURE 7. Linkages expressed in a hierarchical form.

hypothesize that Intercultural Competency's team culture is not as well defined as either the Flex Co-Op or Mentorship teams.

Study-Participant Explanations of Team Dynamics

Supplemental Elements

In the Explain step of the Describe–Draw–Explain sequence, we only consider study-participant statements that added new information beyond what was provided earlier. We found that 85 percent of interviewees offered additional detail. They either referenced their own drawings as a basis for further discussion ($N = 14$) or they simply articulated new

insights related to their team's dynamics ($N = 3$) (see Table 4).

A majority of members of all three teams were able to expand on features in their drawings, thereby augmenting understanding of what they had drawn. A Flex Co-Op team member drew icons to represent her team members (see Fig. 8). In her explanation, she elaborated on why she had drawn these icons:

So for Carl I drew a set of eyes because...he was like very observant and kind of quiet a lot of the time...I put Annika as an ear because she was mostly in charge of listening and...organizing everything...I put Simon as a hammer because I felt like he's such a doer...if you give him a task, he will do it...And then Grace...I

TABLE 4. Value-Added Descriptions Post Drawing

	Flex Co-Op	Mentorship	Intercultural Competency	Total
Expansion on the drawing's features	6	4	4	14
New discussion points beyond the drawing	0	0	3	3
Total	6	4	7	17



FIGURE 8. Icons characterizing the team members.

put a little flame...a fire, an ignition, a spark to some of the conversation....

A Mentorship team member pointed out why she had included one name in her drawing of arrows shaped in a circle (see Fig. 9): “I mean in some ways it’s a circle, I guess, but yet a circle with a point...I would say the point person is definitely Sandy. I mean he is the main person driving all of the action. I mean if we didn’t have someone doing that, I mean all ultimately, we would not have

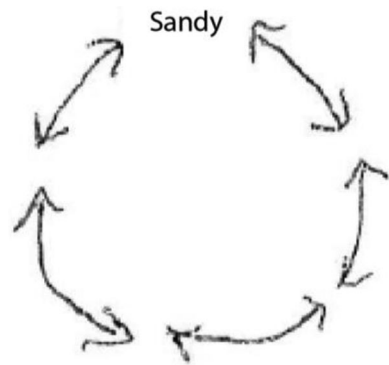


FIGURE 9. A “pointed” circle highlighting the new leader.

the team.” Similarly, an Intercultural Competency team member offered her reasoning for drawing an infinity symbol:

We sort of altered roles and so one of us would take leadership one time and another one would be taking notes. We sort of had that process of shifting leadership and kind of in a cyclical or iterative way, balancing and rebalancing the efforts and the contributions that people were making.

Three other study participants, all associated with Intercultural Competency (see Table 4), brought new topics into their interviews—beyond what they included in the Draw or Describe steps. Two of these interviewees stressed the role of university leadership in implementing intercultural learning on campus. One indicated his relationship with a particular dean: “We work with him quite a bit in terms of programming with university partnerships, exchanges...” while the other spoke of the administration generally: “The university has this

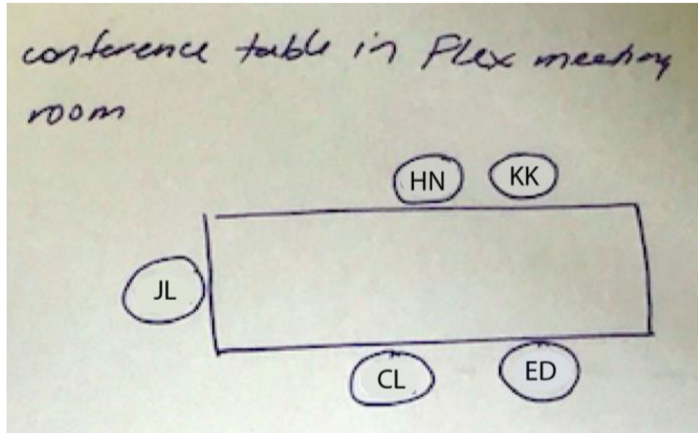


FIGURE 10. Recalling the specifics of the team setting.

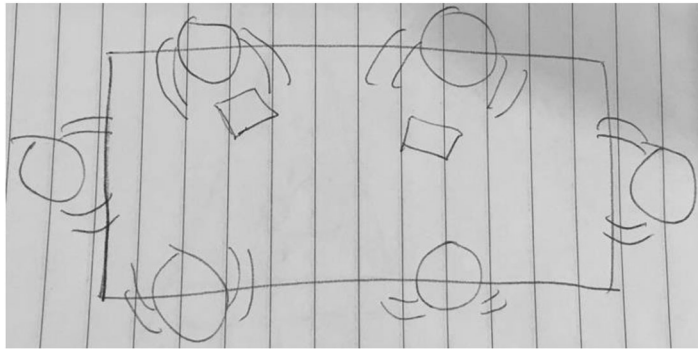


FIGURE 11. Reimagining the experience of “being there.”

initiative and priorities of incorporating this (inter-cultural learning) into the curriculum.”

Experiential Dimension

The Explain step yielded another salient finding: in focusing on their drawings, some team members possessed the ability to re-create the team-meeting context verbally. Three interviewees from either the Flex Co-Op team or Mentorship team offer us a glimpse of what they personally experienced. Looking at his drawing (see Fig. 10), a Flex Co-Op team member recalled:

So, what comes to mind is the room. And we're sitting around this conference table. And the people that come to mind are (person A), who kind of sat in front and right of me. There is a person from (another Engineering School, person B) who was sitting on that side of the table. There was a Co-Op student... (person C)

who sat on my side of the table. And then of course, there was (person D) who was at the front. And so, I see these people there and I can watch them, and I can get from their demeanor what their thoughts are.

A Mentorship team member put it this way (see Fig. 11):

There are six people sitting around the table with all of them kind of leaning into the table and two out of the six have a piece of paper that they're kind of using to write down ideas or communicate their ideas. Five out of the six are kind of leaning in and listening and the sixth person is a little bit more casual, just kind of thinking about things. But they're all kind of equally spaced around the table and everyone is looking at each other and kind of focus kind of towards the center of the table, if you will. All the conversations are going inward.

These reflective narratives convey a particular moment—a snapshot in time—of activity. They are the closest we get to “being there” in the conference rooms as participant observers.

Discussion

We had difficulty finding examples of anthropologists soliciting drawings from study participants to understand their views and conceptual models because they typically rely on images such as photographs and videos (Soukup 2014) or on their own field drawings (Taussig 2011). Convincing adults to draw is not always easy: one researcher reported being unable to convince her adult study participants to complete some sketches (Johnson, Pfister, and Vindrola-Padros 2012), an issue we did not encounter. An exception to this dearth of literature on study-participant drawings is Edgar’s (2004) *imagework*, which emphasizes both drawings and discourse to reveal broader group patterns. His charge that “imagework and its objectified forms (such as artwork, drama and mask-making) become part of visual anthropology in future” (2004, 90) has not roused a significant following.

Methodological Value of Study-Participant Drawings in the Describe-Draw-Explain Sequence

Johnson, Pfister, and Vindrola-Padros (2012, 175) asserted the usefulness of combining visual and textual data as “complementary methods with children.” We take a more expansive view as we address our first research question about the methodological gains in applying the Describe-Draw-Explain sequence. We argue that “entanglements of image and text” (Geismar 2014, 101) can extend beyond children to adults, and beyond anthropologists to study participants—with no inherent necessity for restrictions by age or occupation.

Our data gathering and analytical sequence involving description, drawing, and explanation incorporates both visual and verbal outputs from the interviews. While similar to Ingold’s “making, observing, and describing” (2016, 4), our approach

bookends the drawing step with verbal responses and discussion related to the interview questions. It has the value of keeping the visual and the verbal “in balance with each other” since, as Causey (2017, 3) explains, “There are some things one can capture in words to convey information, some others best photographed, yet other experiences are best drawn.” The Draw step is a focal point because of the request for and creation of an unusual and imaginative product. It allows study participants to expand their perspectives in a visual and open manner, revealing different “ways of seeing” a particular phenomenon such as internal team dynamics (Kuschnir 2016, 105). The drawings are also expressive in their own right, providing researchers with “ways of knowing the world” (Kuschnir 2016, 105) through study-participant conceptualizations.

We also discovered some additional benefits of including drawings in the research design. First, creating a sketch is fast—assuming that one is not seeking artistic excellence! Second, interviewees appeared to enjoy the process once they got over their discomfort. Requesting that interviewees create a drawing “fast” and “not overthink it” seemed to be a satisfying challenge that encouraged interviewees to convey their emic perspective in a mode other than words. Third, drawing lends itself to phone (or online) interviews, a particularly useful technique in the COVID-19 era. Study participants can describe what they drew and then later send the interviewer a copy of the drawing electronically.

Comparing the Draw and Describe Steps

All 20 study participants added some novel content to their drawings (e.g., pertaining to team members, meetings) when we compared the Draw step in relation to the Describe step. This finding is consistent with the work of Afonso (2004, 76). She discovered that local illustrations by an anthropologist colleague resonated with her Portuguese villagers and led to a “profusion of ethnographic details” and an exploration of their “social memories.” Moreover, the details that Afonso’s study participants remembered were quite specific (e.g., strategies for crossing a river), as were ours. Many other drawings incorporated or were composed of symbols depicting conceptual generalizations of team

dynamics—consistent with Kuschnir's (2016, 123) view that drawings may convey “not only visual information, but also abstract concepts.”

Comparing the Explain and Describe Steps

This same pattern of novel content reappeared in the second part of the sequence, this time with words. When we contrasted verbal statements in the Explain step with those in the Describe step, 85 percent of study participants offered further detail. The majority of these study participants used the drawings as a springboard to enhance the interview with stories, viewpoints, and other insights. The drawing process seems to parallel the use of cultural probes by design researchers (Gaver, Dunne, and Pacenti 1999). Where sketches, mock-ups, and “things-to-think with” (Brandt 2007, 185) become a foundation for reflection, debate, and consensus building for the design community, drawings encourage new flows and types of information during the interview.

A related aspect of the Explain and Describe analysis involved the use of drawings to re-create the experience of team meetings. We identified a few instances in which study participants spoke directly from their drawings as if those drawings illustrated live activity. In effect, the drawings functioned as “platforms” on which study participants could “represent their experiences, views, or culture” (Pink 2004, 10) by explaining what was going on, what team members were doing, and how they were reacting. As such, the Explain step enabled study participants to “re-live the moment” (Ingold 2016, 1), engage in a “dialogue with [their] surroundings” (Taussig 2011, 30), and reflect on the experience “of being *there*” (Hendrickson 2019, 200).

Cultural Value of Study-Participant Drawings

Our second research question asks how requesting drawings from study participants adds cultural value to an interview. The answer is that the drawings on their own, or drawings and their accompanying verbal statements, reveal sizeable cultural differences across teams (see Table 5). We discovered that drawings add significantly to standard interviewing practices because they shed light on emergent team culture, even when those groups ex-

hibit many commonalities (e.g., co-location, staffed, successful) as ours did.

Flex Co-Op and Mentorship exhibit many of the same attributes as shown in the X's matched for size. In the Describe step, we see that team members talk about being part of a particular team and offer details on their collaborative interactions, shared goals, and achievements. The drawings (Draw step) not only reveal small-group activity but also team leaders that are visually distinctive from team members, suggestive of the salient leadership role. In the Draw–Describe comparison, study participants in both teams added new features in their drawings (e.g., names, number of team members). Symbols were reflected in a limited number of team drawings as indicated by the lower-case x and consistent with the Draw step. Finally, both teams used their drawings in the Explain step to (1) elaborate on the information they introduced in the Describe step, or (2) re-create the atmosphere of being in a team meeting through a retelling of the experience. Although these two Explain-step elements were not weighted similarly (as indicated by the sizes of the X's), they confirm the value of the drawings as a mechanism for evolving the interview's content.

Differences between Flex Co-Op and Mentorship appear both in the initial verbal descriptions and in Table 5. For example, the leadership theme was expressed differently with a stress on guidance in Flex Co-Op and persistence in Mentorship. Mentorship team members conveyed a greater sense of action and movement (visual analysis) and a somewhat greater ability to re-create the team experience (Explain step) than their Flex Co-Op counterparts. On the other hand, Flex Co-Op used their drawings to reflect and contribute more details than did Mentorship.

Intercultural Competency's emergent cultural features sharply diverge from those of the other two teams. Notable among the differences are that its members neither perceived themselves as collaborators on a team effort nor were they able to specify attributes about interactions and activities at team meetings. This team's goals were also primarily relevant for the team leader, not all members (Describe step). In addition, both the Draw step and Draw–Describe comparison reveal generality rather than specificity. We argue that this greater reliance on generality and abstraction is more congruent with a network than a team. Networks have multiple areas of focus and many goals coexisting simultaneously. Network members only occasionally

TABLE 5. Comparison of Selected Attributes by Grassroots Team and Step in Describe–Draw–Explain Sequence

Grassroots teams				
Step	Attribute	Flex Co-Op	Mentorship	Intercultural Competency
Describe	Team members describe themselves as part of a particular team effort	X	X	
	Team members articulate detailed information about team interactions, processes/practices, and accomplishments	X	X	
	Team goals are based on the interests of the team leader			X
Draw (visual analysis)	Small group engages in an activity together	X	X	
	Leader is distinguishable from team members	X	X	
	Sense of action is prominent	x	X	
Draw–Describe comparison	New details (e.g., names, number of team members) are depicted in Drawings despite a lack of mention in Describe	X	X	x
	Generalized depictions of team dynamics not referenced in Describe	x		X
Explain	Drawings are used to expand discussion beyond Describe	X	x	x
	New points are made largely independent of the drawings			X
	Drawings enable some team members to re-create the team experience of “being there”	x	X	

X, dominant presence; x, limited presence.

[Correction added on March 09, 2021 after first online publication: Table 5 was updated.]

interact to work on an issue (e.g., by sharing expertise). Intercultural Competency’s work seemed to be only one of several initiatives focused on student acquisition of intercultural learning. Its projects orientation appeared to be less about the work and outcomes of a cohesive team and more about

satisfying a variety of individual and/or organizational objectives. It is not surprising then that Intercultural Competency team members were not able to re-create the sense of “being there” as part of the team experience (Explain step). The team leader’s drawing represents this apt metaphor (see Fig. 12).

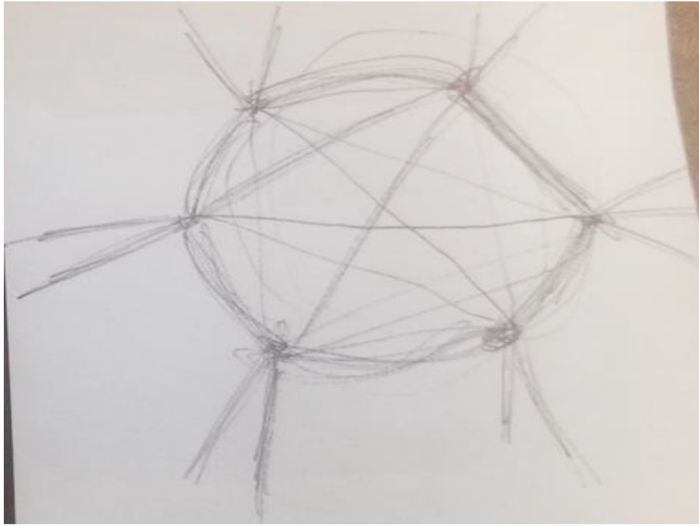


FIGURE 12. Intercultural Competency's dreamcatcher symbol.

Conclusions

We draw some key conclusions from our approach. First, incorporating drawing as an intermediate step in a three-step methodological sequence is useful as a way to triangulate the data collection and analysis process. Interviewee discourse before and after the drawing is done helps to place the drawing in context. This sequential approach enables comparison and contrast, which ultimately improves validity. When the verbal statements and sketches appeared at odds, our follow-up questions and responses helped clarify, explain, and/or lead to further insight. Once consistency between statements and drawings was evident, our confidence in this methodology was validated; we had captured the anthropological concept of holism in a new way.

A second and related matter pertains to novelty that the three-step sequence affords. The act of drawing resulted in creative illustrations along with upbeat interviewees. Moreover, the sequence of steps proved highly informative. Twice we discovered that study participants contributed new details after their initial descriptions of team dynamics. In the Draw step they exercised their imagination by linking and making sense of their team experiences in an unorthodox manner. Their drawings embellished and amplified what they had offered in the Describe step, products that were highly salient to

the interviewee—much like the top elements in a free list. Then, when asked to explain what they had drawn, further insights arose (Explain step). Typically, statements and stories followed, enabling us to understand study-participant perspectives in an in-depth way—including moments at team meetings which some recalled upon looking at their own drawings.

Third, our analyses align with many of the same features captured in the burgeoning literature related to anthropologist field drawings. For example, the drawing *process* encourages the artist—whether anthropologist or study participant—to contemplate and express ideas in a nonverbal medium. The *output* of the drawing process, the sketch produced, allows the artist to call attention to certain cultural details. Thus, both process and product are “transformative” (Ingold 2013, 129) for the producer and the viewer. Our replication of insights from anthropologist field drawings highlights the potential of this drawing method. We believe it is time for anthropologists to embrace the solicitation of study-participant drawings in an interview context, thereby including this value-added technique in the anthropological toolkit.

Finally, in simple, clear strokes, drawings can illuminate key aspects of culture. Sets of drawings and their accompanying narratives can be compared for similarities and differences, positioning the anthropologist to explain patterns within

and across groups. The differentiation may be singular, focused, and integrated with groups acting as cohesive teams, or multipronged, evolving, and tangential as networked individuals occasionally contributing to some effort, or something entirely different. The point is that drawings compiled by a group or organization tell a story, revealing the dynamics and structure of that entity's culture or emergent culture. Given the immediate and time-limited nature of the drawing request, positive study-participant response during the interview process, and analytical value derived from it, we challenge anthropologists to sharpen their pencils and create new research designs that encourage discourse around study-participant drawings.

References

- Afonso, A.I.
2004. "New Graphics for Old Stories: Representation of Local Memories through Drawings." In *Working Images: Visual Research and Representation in Ethnography*, edited by S. Pink, L. Kürti, and A.I. Afonso, 72–89. London: Routledge.
- Bernard, H.R., A. Wutich, and G.W. Ryan.
2017. *Analyzing Qualitative Data: Systematic Approaches*. 2nd ed. Los Angeles, CA: SAGE.
- Brandt, E.
2007. "How Tangible Mock-Ups Support Design Collaboration, Knowledge." *Technology and Policy* 20:179–92.
- Causey, A.
2017. *Drawn to See: Using Line Drawing as an Ethnographic Method*. Toronto: University of Toronto Press.
- Edgar, I.R.
2004. "Imagework in Ethnographic Research." In *Working Images: Visual Research and Representation in Ethnography*, edited by S. Pink, L. Kürti, and A.I. Afonso, 90–106. London: Routledge.
- Fetterman, D.M.
2020. *Ethnography Step-by-Step*. 4th ed. *Applied Social Research Method Series*, Vol. 17. Thousand Oaks, CA: SAGE.
- Gaver, B., T. Dunne, and E. Pacenti.
1999. "Design: Cultural Probes." *Interactions* 6:21–29.
- Geismar, H.
2014. "Drawing It Out." *Visual Anthropology Review* 30(2): 97–113.
- Hendrickson, C.
2019. "Drawing in the Dark: Not Seeing, and Anthropological Insight." *Anthropology and Humanism* 44(2):198–213.
- Ingold, T.
2013. *Making: Anthropology, Archaeology, Art and Architecture*. London: Routledge.
- Ingold, T., ed.
2016. *Redrawing Anthropology: Materials, Movements, Lines*. London: Routledge.
- Johnson, G.A., A.E. Pfister, and C. Vindrola-Pardos.
2012. "Drawings, Photos, and Performances: Using Visual Methods with Children." *Visual Anthropology Review* 28(2):164–78.
- Kuschnir, K.
2016. "Ethnographic Drawing: Eleven Benefits of Using a Sketchbook for Fieldwork." *Visual Ethnography* 5(1):103–34.
- LeCompte, M.D., and J.J. Schensul.
2013. *Analysis and Interpretation of Ethnographic Data: A Mixed Methods Approach*. *Ethnographer's Toolkit Book 5*. 2nd ed. Lanham, MD: AltaMira Press.
- LeCompte, M.D., and J.J. Schensul.
2010. *Designing and Conducting Ethnographic Research: An Introduction*. *Ethnographer's Toolkit Book 1*. 2nd ed. Lanham, MD: AltaMira Press.
- Merriman, B., and S. Guerin.
2006. "Using Children's Drawings as Data in Child-centered Research." *Irish Journal of Psychology* 27(1–2):48–57.
- Mitchell, L.M.
2006. "Child-Centered? Thinking Critically About Children's Drawings as a Visual Research Method." *Visual Anthropology Review* 22(1):60–73.
- Morrison, E., S. Hutcheson, E. Nilsen, J. Fadden, and N. Franklin.
2019. *Strategic Doing: Ten Skills for Agile Leadership*. Hoboken, NJ: John Wiley and Sons.
- Morton, C.
2018. "The Graphicalization of Description: Drawing and Photography in the Fieldwork Journals and Museum Work of Henry Balfour." *Anthropology and Photography* 10:1–25.

- Pink, S.
 2004. "Applied Visual Anthropology Social Intervention, Visual Methodologies and Anthropology Theory." *Visual Anthropology Review* 20(1):3–16.
- Rodríguez-Mejía, F.R., E.K. Briody, R. Rothstein, and E.J. Berger.
 2020. "Implementing Grassroots Initiatives of Change: The Combined Perspectives from Psychology and Anthropology in an Engineering School." *International Journal of Engineering Education* 36(3): 1097–116.
- Soukup, M.
 2014. "Photography and Drawing in Anthropology." *Slovak Ethnology (Slovenský Národopis)* 62(4):534–46.
- Strassler, K.
 2006. "Reformasi Through Our Eyes: Children as Witnesses of History in Post-Suharto Indonesia." *Visual Anthropology Review* 22(2):53–70.
- Taussig, M.
 2011. *I Swear I Saw This: Drawings in Fieldwork Notebooks, Namely My Own*. Chicago, IL: University of Chicago Press.