

## Starting the Conversation: Initial Listening and Identity Approaches to Community Cultural Wellness<sup>†</sup>#

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**Inclusion of multiple viewpoints increases when teams are diverse and provides value in scientific communication and discovery. To promote retention and raise the critical mass of underrepresented persons in science, all voices must be heard “at the table” to include “ways of knowing” outside the dominant institutional culture. These community-based inclusive concepts promote hearing all diverse perspectives for inclusive recognition of deeper socio-historical cultural wealth—collectively termed cultural wellness. When undergraduates and graduates in active-learning groups in class, or faculty collaborative teams on campus, start a project too quickly on task, opportunities are missed to be inclusive. While beginning a larger science project, we, student and faculty co-authors, first addressed this challenge—the need for greater inclusion of diverse perspectives—by starting a conversation. Here, we share ideas from our inclusive process. Based on social constructivist theories of co-constructing learning interpersonally, we co-mentored each other, learning from one another in community. We experientially considered how to inclusively collaborate across a demographically, geographically, and structurally heterogeneous group including multiple academic tiers from multiple ethnic backgrounds, cultural experiences, and institutions. Through an asset-based process grounded in several frameworks, we documented our introduction process of listening deeply, being mindful of identities including invisible cultural identities, recognizing each other with mutual respect, applying inclusive practices, and developing mutual trust and understanding. Building community takes time. Initial conversations can, and should, go deeper than mere introductions to build trust beyond social norms for relationships promoting cultural wellness.**

### INTRODUCTION

In academia, as in management, leaders want diverse teams to effectively collaborate, bring in external knowledge (1–2), and share collective intelligence through interactions (3). When teams are diverse, the value of sharing different skills, intuitions, and know-how from different experiences increases while engaging on task-related communication and knowledge-sharing practices. Inclusion of multiple viewpoints increases when teams are demographically diverse, structurally diverse by geographic locations, multitiered within the team, and with different managers (1). Since this

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intent also applies to the need for more interdisciplinary and diverse viewpoints in science, technology, engineering, and mathematics (STEM) education and the workforce, then the critical mass of underrepresented persons must increase, and all voices must be heard for effective collaboration.

Despite gains, retention and diverse representation in science is still low (4). Seymour and Hewitt's 1997 seminal work (5) examined retention and sought explanations for why undergraduates leave the sciences; survival strategies with peers and mentors were key in persisting. This focus on interactions promotes active-learning strategies such as icebreakers and group work in the classroom to encourage collaboration (6). Building collaborative skills as a student translates to out-of-classroom academic interactions that educators also employ to promote inclusion on campus and to broader multi-institutional endeavors. Yet, beyond simply increasing diversity numerically, teams can better support inclusion by embracing identities, promoting engagement, and considering deeper cultural levels for retention (7). These inclusive practices can take place as undergraduate and graduate students begin in-class group projects, as student-faculty research teams engage with one another, or as academic faculty teams on campus advocate for more inclusion in institutional meetings. Initial conversations can, and should, go deeper than mere introductions as applications of active, inclusive collaboration. Our team of co-authors engaged in these conversations to build inclusion while embarking on a larger STEM project.

STEM education and retention relies on collaboration rooted in Vygotsky's pioneering work of social constructivist learning, i.e., humans learn natural and social science concepts through social, interpersonal interactions (8, 9). Since each unique history influences linguistics, behavior, and cognitions, then multicultural collaboration with diverse peers also shapes personal development. Internal transformation begins with interpersonal social learning (8, 10, 11) informing present-day active learning, heterogeneous group inclusion, and gains in STEM learning and retention (12).

Since more heterogeneous, collaborative group structures are occurring in STEM classrooms and campus meetings with increasing numbers of underrepresented persons, then sociocultural awareness of the different cultural influences within these groups must also develop. This thinking is fundamental to cognitive development in social and cultural capital progress, yet in a dominant monocultural environment, culture can remain invisible (8, 13). STEM students and faculty are multifaceted. Inclusive needs go beyond providing social support for those with multiple, complex, or hidden identities, lacking belonging, or feeling pressure from institutional group work (14). If not addressed, important recognition of cultural history and individual identities in the science learning process can keep cultures invisible. By ruling out discussion of cultural variation and identity, interactions may follow the dominant norm making all cultures indiscernible, including the recognition of a pervading institutional culture (15–17). Based on the process of co-constructing

knowledge and making meaning through interactions among a “more knowledgeable other” teacher, or peer (8), there are different approaches to forming learning communities for cross-cultural mentoring (18–21). One approach is a co-mentoring collaborative learning environment, proactively engaging in reciprocal teaching and learning from one another to build a relationship of reciprocity and inclusion where students become teachers and faculty become peers.

## ADDRESSING CHALLENGES

With gains in STEM diversity and retention, students and educators can benefit from continued self-study and reflection of self-growth. Through the co-mentoring model, STEM participants can learn from each other to better equip themselves in being more culturally aware, understanding implicit biases, and building inclusive practices into active-learning curricula and campus meetings beyond the dominant institutional culture power structures and status quo. Along with academic theoretical frameworks, e.g., social constructivist, interpersonal, collaborative, and active learning, it is important to recognize nonacademic community-building perspectives that meld and evolve in the development of a co-mentoring model (Fig. 1). To address challenges of inclusion, our community of co-authors use the term “we” to emphasize our unified experiences as a diverse, multitiered team learning from one another and practicing co-mentoring each other in community. While building deeper collaborative skills, we emphasize different language from theories and inclusive practices. For all voices to be heard “at the table,” we recognize socio-historical perspectives as other “ways of knowing” and affirm “anti-deficit assets” outside the dominant institutional culture to promote inclusion in all aspects of STEM educational experiences.

Building community plays a central role in inclusion; however, it takes time to find common ground and build an interdisciplinary, culturally supportive community (22) for cultural wellness. This wellness stems from “cultural capital” (23) as group consciousness and collective identity serves as a resource for an entire group. An expanded “cultural wealth model” (24) focuses on capturing talents, strengths and experiences of those “in community” with different ways of knowing, aspirations, language, and communication. Personal human resources come through familial, community, and social connections. Especially in education, navigational experiences through institutions (often structured by the dominant culture in leadership) and resistance capital as a historical culture of engaging in social justice can be valuable.

Since academic jargon is not accessible to everyone, our community starting point began by embracing a non-institutional, nonacademic model to promote well-being and cultural wellness informed by the Cultural Wellness Center's (Minneapolis, MN) philosophy, “*People's Theory of Sickness*,” that individualism, loss of culture, and loss of community make people sick (<http://www.culturalwellness-center.org/about-us/our-philosophy/>). Cultural wellness



FIGURE 1. Theoretical frameworks supporting inclusive co-mentoring communities. Several academic frameworks and cross-cultural engagement perspectives helped us start the conversation in our inclusive collaboration. Beginning with social constructivist interpersonal learning, forms of active learning such as collaboration improve student outcomes. In groups, cultural capital and wealth developed through a cultural history form individual and group identities, which may be overt or hidden. In co-mentoring, this diversity is important in rich, reciprocal knowledge and viewpoint sharing. Through asset-based thinking, respecting different ways of knowing in cross-cultural engagement, and tapping into innate health, the community reinforces cultural wellness. In any classroom project, campus, or community meeting, if we want to have more inclusive collaborations, then attention to starting the conversation is valuable.

develops through an intentional, multidimensional process recognizing deeper levels of historical culture and peoplehood away from dominant institutional constructs. Wellness arises from forming positive relationships and recognizing, understanding, and respecting the diverse and rich cultural backgrounds and identities of each other. By leaning into inclusive practices, mindful of individual identities, background, diverse viewpoints, limitations, and numerous abilities that each brings, then “we” as a community can complete a task while promoting cultural wellness. This tenet recognizes that no one culture has the authority to impose or dominate, even if the underlying dominant institutional power structure pervades academia with measured outcomes and processes of submission, acceptance, and publication of papers leading to recognition, promotion, awards, and tenure. This community-based model, however, utilizes cross-cultural engagement and ways of knowing other than scientific and Eurocentric worldviews placing emphasis on cultural views (25, 26). As inclusivity increases, so does the value of shared personal experience.

Thus, our shared experiences enhanced our community while we began a collaboration toward a separate STEM

project. Our inclusive process challenged us to merge institutional and sociocultural viewpoints as we formed a heterogeneous team focused on inclusively collaborating across geographically and demographically diverse team members. In the spirit of co-mentoring, presenting our identity as a whole person, not just a professional role, learning from one another, and listening to personal and cultural identities, our diverse, multitiered, co-mentoring team provides our inclusive strategies to promote cultural wellness in the classroom and workplace (Table 1), sharing and expanding our practices with an adaptable template (Appendix 1). We continue to work toward our larger STEM project, not discussed here. Instead, our initial inclusive discussions provided a form of active learning to promote retention for the students, while also acting as a collaborative research group for faculty to share personal experience from our institutions. As we focused on inclusive first steps of a community-building approach with cultural wellness practices and scientific communication, our aim for this paper was to share our ideas from our developed practice of what we assert—that inclusion-building in any project begins with “starting the conversation.”

## OUR COMMUNITY-FORMING PROCESS

We, the community of student and faculty co-authors, formed as a multi-institutional, multigenerational, multi-ethnic, and heterogeneous on geographic and other demographic levels in a spontaneous, unplanned co-mentoring team model, as opposed to a planned recruitment or assigned dyad mentoring (21). Faculty meeting briefly at conferences and academic events had only superficial connections but commonality of science professions and identified gender pronouns. Our students had some familiarity with us and with each other at respective institutions. Student co-authors were those who happened to be in the room during our first teleconference call; others coming into the room joined from prior classes, research, work study, or directed studies for credit connections. All were welcome “at the table.” Our ethnographic self-study included shared observations from past engagements in different groups at our various academic settings (Table 1).

Despite our heterogeneity, three group formation social theories were relevant (27). Similarity-attraction theory applied with similarity of STEM attitudes, values, and beliefs facilitating interpersonal collaboration. Cognitive self-categorization/social identity theory applied with introductions and self-proclaimed identities as scientists, students, and senior or junior faculty in the biological, biochemical, and molecular biology fields of STEM. Applying information-processing theory, we first engaged on our technical STEM project, which continues to act as an orienting task—one that focuses our goals on science in the context of our inclusive conversations. However, when we started our first conversation with introductions and identities, the conversation evolved toward a more realized inclusive

TABLE I.  
Expansion of the group's processes and strategies.<sup>a</sup>

Circumstance or Process	Further explanation/expansion
<p><b>Community-Forming Process</b></p> <p><i>Prompt invitation:</i> We're forming a community co-mentoring discussion with another institution, join as you are able.</p> <p><i>Prompt goals:</i> We are all learning from each other, co-mentoring each other. Think about what we can learn from you, or what you would like to learn as we work on a focused task.</p>	<p>One faculty from a Predominantly White (PWI) research institution in the Northern Midwest U.S. (University of Minnesota) which hosted a CRISPR workshop met two faculty from a Historically Black College or University (HBCU) in the Southern Eastern U.S. (Tuskegee University); and over lunch and a drive to the airport started discussing a STEM project on CRISPR. These faculty had students working on projects who were invited to join in our conversation. Other faculty from community colleges with diverse populations (Minority-serving, Hispanic-serving) were invited. One faculty (St. Paul Community College) had briefly met during a visit discussing transfer from a community college to a research institution and technical accessibility to transfer students. One faculty in a new faculty position at first joined the group, but needed to pull back and remains <i>in community</i>. Days later, after a quick scheduling poll, during our first teleconference, we approached co-mentoring each other on how to write and submit a paper, approach IRB, and inclusively build a diverse group working toward our long-term STEM-project (CRISPR) goals. We were attentive to <i>starting the conversation</i> inclusively with the scientific discussion provided an orienting task for focus. Some students came to the teleconference meetings and joined. Others engaged peripherally to continue in our STEM-project science-communication focus.</p>
<p><b>Introductions and Identities</b></p> <p><i>Prompt:</i> Introduce yourself and how you identify?</p> <p><i>Prompt:</i> Please share preferred gender pronouns and help us be clear in saying preferred names.</p> <p><i>Prompt:</i> Did we pronounce your name correctly?</p> <p><i>Prompt:</i> What would you like us to know about you?</p>	<p>1. <i>Initial starting points:</i></p> <ul style="list-style-type: none"> <li>(a) <i>Icebreakers</i> (superficial connection but important in process)</li> <li>(b) <i>Identity</i> sharing, skills, modes of working, preferred methods of contact</li> <li>(c) Timing availability throughout project</li> <li>(d) Allow time in a <i>relaxed, conversational manner</i>, ensuring everyone's viewpoint is expressed and included</li> </ul> <p>2. <i>Identity-sharing</i></p> <ul style="list-style-type: none"> <li>(a) <i>Personal, reflective</i>, and ongoing in development</li> <li>(b) <i>First stage:</i> surface level (e.g., science major, biologist, chemists, transfer student, professor, public health or scientist)</li> <li>(c) <i>Subsequent stages:</i> deeper level as trust grew (e.g., women, men, queer, straight, Black, White, African American, origins as European, Haitian and West African, Indian, East and West Asian, immigrant, immigrant American, international visiting student, older non-traditional, first-generation, disabled, chronically ill, visually impaired, levels of having mental unhealth and health towards practices of wellbeing, and hospitalized while kept in community).</li> <li>(d) Multiple rounds help clarify names, pronunciations, preferred gender pronouns, and develop trust</li> </ul> <p>3. <i>Deep listening</i> practiced</p>
<p><b>Identities beyond Introductions</b></p> <p><i>Prompt:</i> Let's introduce ourselves again and share something more you would like us to know about you.</p> <p><i>Prompt:</i> What do you bring to the table: strengths and skills?</p> <p><i>Prompt (not used here):</i> Who are your people and how does that impact what you are sharing?</p>	<p>We first introduced ourselves on surface levels.</p> <p>With each subsequent introduction, when others joined later, we delved deeper as our comfort and trust grew to share how we identified on other levels. Some hidden identities and health issues may not be shared. Sometimes another member in the community needed an accommodation, and another group member helped them connect.</p> <p>Meeting time is valuable, so rather than conversation, we can learn more from each other in a turn around the table at different levels of identity for members to build community.</p> <p>We moved from <i>I am a scientist</i> to <i>I am a woman in science</i>, or more culturally to <i>I am a Black woman in science</i>, or <i>I am a White woman at a Predominantly White Institution</i>.</p>

<p><i>Deep Listening for the Invisible</i></p> <p>Prompt: As we listen deeply, pay attention to what is said and not said without judgment, distraction, or interruption.</p> <p>Prompt: Writing this paper, submission and review processes have sometimes awkward timing. Is there anything we should know for timing?</p>	<p>When practicing deep listening for the invisible, we heard <i>I identify as being a mom</i>, and understood this may mean not to plan a weekend deadline; whereas, another group member planned their writing and homework time on the weekend but was not free until <i>afternoon on Sunday</i>, while yet another does <i>not work on Friday afternoon</i>. These could signal other identities associated with family or religion that might surface and help plan timelines and expectations. Some <i>nights owls</i>, and other <i>early birds</i>, or those with <i>long commutes</i> signaled timing cues. If we were attentive, we understood availability during times such as cultural festivals or holidays (like Rosh Hashanah, Eid, fasting, Chinese New Year). Culturally understanding these invisible signals and priorities brings us into community and promotes wellbeing. For example, we say <i>We in the community have different identities, or experiences such as mental health and unhealth which at times may impact our ability to perform, to progress or fulfill completion of a task in a group setting</i>.</p>
<p><b>Strategies for Communication and Accommodation</b></p> <p>Prompt: We are practicing co-mentoring where we all are learning from one another.</p> <p>Prompt: We are practicing community and you are part of this community with flexible forgiveness if we need to support each other during times to promote well-being.</p> <p>Prompt: What modes of contact do you prefer? Are you willing to share your cell phone number?</p>	<p>Discussed our boundaries via:</p> <ol style="list-style-type: none"> <li>1. Communication             <ol style="list-style-type: none"> <li>(a) internet (Google Doc, emails, teleconferences)-faculty preferred email, but we discussed boundaries of cell phone contact</li> <li>(b) phone calls, text messages and applications such as GroupMe – some students did not read emails or see notifications; some faculty did not use other technologies except email</li> <li>(c) face-to-face</li> <li>(d) discussed accommodations, i.e., visual impairment</li> </ol> </li> <li>2. Structure             <ol style="list-style-type: none"> <li>(a) shared input of ideas on inclusivity vs. exclusivity</li> <li>(b) discussion of track changes in Word; use of <i>editing</i> directly vs <i>suggesting</i> mode in Google Doc – noted some did not have Word, some had no university gmail account so used personal gmail for Google</li> <li>(c) <i>To Do List</i> assigned to members of tasks, instructions, and suggestions.</li> <li>(d) roles based on availability and assets; paired roles if needed assistance</li> </ol> </li> </ol>
<p><b>When Active-Learning Co-mentoring Kicks In</b></p> <p>Prompt: Consider reflection, self-study and what new thoughts and learning you are "walking with."</p> <p>Prompt: What more can you teach us all and what more can you learn in co-mentoring?</p> <p>Prompt: Are you familiar with your role/task? Is there anything someone else can help with? Are you able to meet the deadline? Can someone else help pick up a role/task to help?</p>	<p>In active-learning collaboration, self-study is key in development.</p> <p>Being assigned a group in class has its own challenges when professors are unaware of student relationship dynamics.</p> <p>Choosing groups in class can leave some identities feeling isolated.</p> <p>Ideally as professors begin a group project, in a classroom there would be several initial starting points such as icebreakers, which may be surface level, but essential.</p> <p>It is valuable to have a script for faculty leaders or students to follow with shared identity, timing availability throughout project, skills and modes of working.</p> <p>Allowing time to start this conversation in a relaxed manner promoted stronger commitment to completion of both this writing task and the STEM project (Appendix 1).</p> <p>With time limitations, the depth of thought in the work may not include everyone's viewpoint unless community is developed.</p> <p>If conflict arises, deep listening and respect help resolve.</p> <p>With communication, even the role of an organizer could be filled collectively for backup should the organizer became overwhelmed or forget important tasks. Respectfully receiving/providing help without stepping in as a savior is valued.</p>

<p><b>Power Dynamics and Building Consensus in Heterogeneous Community</b></p> <p><i>Prompt:</i> Are there any power dynamics we need to be aware of?</p> <p><i>Prompt:</i> Has everyone voiced their thoughts?</p> <p><i>Prompt:</i> Is your viewpoint represented in the document?</p>	<p>1. <i>Self-study</i></p> <p>(a) cultural awareness of self and relationship with others</p> <p>(b) On teleconferences:</p> <p>(i) natural pauses after speaking helped with the flow of discussion avoiding interruptions so someone could be not talk over another</p> <p>(ii) As new people came into the room during meetings or joined teleconferences late, we circled around for introductions again, with deeper prompts allowing opportunity to break and go deeper on identities and concepts</p> <p>(c) <i>Google Doc</i>: space provided for reflective time, and to share as communication medium of inputs and ideas</p> <p>2. <i>Knowledge production</i></p> <p>(a) <i>Written documentation</i> format from individual perspectives of what we heard to keep records of comment history, edit, and refine to come to a <i>consensus</i></p> <p>(b) <i>Meeting agenda</i> and <i>reflective questions</i> provided</p> <p>Following group meetings, we input reflections in Google Doc as we discussed inclusive practices and provided personal input collectively referred to as we so as to de-identify. Google Doc notes were collaboratively written and summarized recommendations were included in the collaboratively written paper and Appendix I. Through the review process we used Word with track changes and multiple email, GroupMe and phone call and text communication.</p>
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<sup>a</sup> Further strategies can be found in Appendix I.

conversation. Just as we do in academic life for faculty and student group projects, our team set a time constraint to meet a deadline. Optimistic views of the value of diversity advocate if teams know goals, timing, and pace of the project, then heterogeneity has greatest impact early in the group formation with greater commitment (27). Our steps to favor this optimism began with our opening introductions and shared co-mentoring practices that naturally promoted early openness and learning from one another (27, 28). Our goals aligned within two aspects of the goal congruity framework: collaboration or helping others (29). This was supported by some of our statements: “It just sounded like a cool idea for us to work together,” and “It’s not just about our learning together but about building generational knowledge to pass on.”

## FACING NORMATIVE CHALLENGES IN HETEROGENEOUS TEAMS

First impressions have import, but they also carry different levels of implicit bias. Heterogeneous teams can fall prey to norms that at the first meeting separate members based on personalities such as strong, overly dominating team leaders, power positions, introversion, stereotypes, and simply lack of congruent communication styles. At inception, if the emphasis is on independence, then individuals focus on their own abilities rather than cooperation; however, in the early stages of group formation, the focus on project and timing can impact heterogeneous group cooperative norms over time (28).

Our steps to circumvent normative patterns began by discussing identities and assets starting with a meeting scheduling web poll and invitation to our first teleconference using a video-based online meeting platform. Our original

STEM project goal slowed as we recognized that when we start group projects and jump in too quickly on task, we do not sufficiently get to know the team members in order to inclusively consider cultural wellness, so the conversation became a primary goal.

Following Gutierrez and Rogoff (15), we moved beyond our specific cultural communities, acknowledging toolkits as “repertoires of practice” acquired through our histories. We shared our perspectives as personal narratives in a cultural-historical approach rather than as stereotyped categories. Acknowledging our ethnicities, genders, abilities and disabilities, and our backstories, we spoke of observations as past tense and not fixed attributes within common experiences (Appendix I). We looked toward learning with ongoing change, checking our assumptions, limiting generalizations within cultural-historical communities and context, and building on cultural capabilities as assets within our co-mentoring community (15, 30). From Harper’s work (31, 32), we were cognizant that reframing perspectives through an anti-deficit achievement framework focuses on achievement and the lessons learned from those who maximize their experience through identity, relationships, and engagement with resources attained through cultural capital and social capital theories (33, 34). Beyond the black/white binary, this framework applies to Latinx(e), international, and other disenfranchised groups or identities having important cultural capital and wealth contributing to success.

We asked what we “brought to the table,” not from deficit-based or differences but focused on an asset-based and anti-deficit approach (35) (Table I). We recognized the abilities we brought to the table such as the highly motivated focus on wet lab experience some brought to apply to the STEM project; detail-oriented technical skills with online tools from some; as well as clarifying, application, and edito-

rial backgrounds from others. We recognized each other with personal attributes of expertise such as what helped us cultivate meaningful relationships, complete group projects, engage in research groups, overcome barriers, successfully near graduation, or publish scholarship.

## IDENTITIES BEYOND INTRODUCTIONS

Latin-derived “identity” means “sameness of one.” While identity is an individualized Western construct, it has more collectivist approaches in other cultures. Institutional culture follows more “monochronic” fixed time schedules, which is not always amenable to some who follow more “polychronic” free-flowing time often found in other cultures. We opted for the latter, more flexible modality of time as members came and went and communicated in a variety of ways. Community is whenever and where ever we are together doing whatever it is we do. Identity is personal, reflective, and ongoing in development. It has been used in history to separate, but also to reclaim identity toward social justice (36). We raised this awareness as deeper-level introductions. Initially we introduced ourselves on surface levels, e.g., science major, and later delved deeper into personal identities (Table 1). We recognized that with complex identities, some of these may be hidden identities. During social times in classroom group work students decide what to share and may feel a lack of belonging (14). In our identity discussions, this too posed a risk for those deciding how much identity to share (37, 38). Recognitions of privilege and different religious and political views were not overtly discussed but were heard through deep listening. Even when using “We” to discuss our community, it was important to recognize power dynamics, both overt as teacher to student and underlying from global society filled with dominant cultural dynamics and historical oppression, which our cultural wellness model attends.

## LISTENING DEEPLY FOR THE INVISIBLE

At our first meeting we introduced “deep listening” without distraction, judgment, or interruption and being mindful of potential communication blocks from emotion, individual differences, or time pressures (39, 40). By listening to the information along with metaphors of symbols or imagery, by what is said and not said, this can reveal underlying cognitions or invisible cultures (41). In our group, we heard identities as mothers, aspirations as future doctors, and challenges being faced as junior and senior faculty, as well as the invisible levels of how we practice well-being, when we take time off, how we engage in teams and preferred communication methods, and time availability toward this project (Table 1). Multiple rounds helped clarify names, preferred gender pronouns, and how students refer to professors in hierarchy and trust. Correct pronunciation of names and pronouns are important. Using the inclusive “We” leaves ambiguity of gender, ethnicity, age, socioeco-

nomics, disability, and pronouns in place except to highlight that these are important aspects of identity important in community to enhance inclusion.

## STRATEGIES FOR COMMUNICATION AND ACCOMMODATION

We spoke English but acknowledged different socio-cultural linguistic histories. We shared input of inclusive or exclusive practices from our diverse viewpoints to develop recommendations to improve inclusion of group projects on campus. Since most of us experienced group projects beginning in person but often done primarily via internet, we used various forms of communication and discussed accessibility (Table 1). We did not assume familiarity with a certain technology and considered color blind possibilities, visual challenges with a screen reader for visual accommodation not detecting comment boxes in Google Doc and track changes in Word, confusing underlines with hyperlinks, or migraine triggers. We planned alternate accommodations.

To provide an inclusive education is to assure that educators can provide high-quality instruction, interventions, and employ Universal Design “collective access” techniques—those which benefit someone with disability but can support all students with or without disability. As an extension, students too are part of this process for peer-mediated support to benefit learning for all students building inclusivity for equal opportunity to achieve success (42). Due to language often minimizing the effects of chronic illness and other physical disabilities, we attempted to put inclusive practices into place, such as a team partner (Appendix 1) (43, 45). Open communication was vital with various states of ability and disability not only to meet American Disability Act compliance, but also to recognize all visible and invisible attributes our identities comprised.

Various forms of outreach communication kept us interconnected and maintained our involvement in the project (Table 1; Appendix 1). At times we may experience social anxiety, introversion, or feel overwhelmed with the amount of work in our daily lives and may respond by avoidance or trying to control a situation to get the task done. With a growing crisis in poor mental health in education (46), part of our community cultural wellness approach was to realize we have innate health and resilience within us and that community helps support our health realization (47). We valued knowing that even if we were not always able to meet our obligations, we were still included in the community, and we developed the phrase and mentality of “flexible forgiveness,” that is, knowing we would remain “in community.”

## WHEN ACTIVE-LEARNING CO-MENTORING COMMUNITY KICKS IN

In active-learning collaboration, self-study is key in development. Being assigned a group or choosing groups in class creates challenges, leaving some identities feeling isolated (14). Ideally, as professors begin a group project in

a classroom there would be several initial starting points. Icebreakers may be superficial, but important. We grappled with setting fixed monochronic meeting times but opted instead for polychronic open meetings to allow more flexibility and be inclusive to more participation. As each new person joined our community with variable schedules, we stopped and welcomed them collectively into the community—even if they could only participate a little. It is valuable to have a model template (Appendix 1) for faculty leaders or students to follow with shared identity, timing availability throughout project, skills, and modes of working. Allowing time to start this conversation in a relaxed manner promoted stronger commitment to completion of both this writing task and our continued progress in the STEM project. Time crunches limited depth from amply getting everyone's viewpoint.

### POWER DYNAMICS AND BUILDING CONSENSUS

Learning from the Cultural Wellness Center, which provided consultation support, we were attentive to different power structures and agreed that everyone has a culture with assets that provides resources to promote health and healing. A community-based consensus model (48) was used to meet our first deadline submission of this paper and throughout the revision process. Dynamics of hearing shared voices through Google Doc provided a collaboratively written “knowledge production process” with tracked changes, suggested, or direct editing. Through teleconferencing, we relied on intentional pauses, repeated introductions for layers of identity, and community wellness checks.

Sharing roles helped build wellness by improving familiarity between group members and reducing stress levels per member. We all shared a heavy load. Distractions and setbacks happened, but in a supportive community with flexible forgiveness, we appreciated being included even if momentarily overcommitted. We were generous beyond the one-shot encounter, giving benefit of the doubt if an interaction appeared one-time only (49, 50) and kept members in the community as long as possible to encourage reciprocity. Sometimes it meant others having to fill in the gaps. Like students who have had a group member drop the class while nearing the project end, we had some who simply felt the need to pull back from the project, feeling they had not contributed enough. Saying “no” to taking on too much was also a practiced skill. We agreed in a community consensus that any level of intellectual contribution was still part of the team and that everyone who made contributions remained as a co-author, acknowledgment, and/or continued for our longer STEM project. We wanted continued community and provided more flexibility to attain it. Sometimes, this accommodation was the significant part of inclusion. With institutional deadlines such as end of semester finals, power shifted to faculty through the review and revision process; some took a break and focused on wellbeing in different

ways while others fell into institutional norms and power dynamics. Even while power and the voice of reviewers came into the revision process of this manuscript, we continued through our consensus-building processes. In essence, this demonstrates inclusion of the reviewers as well.

### CONCLUSIONS AND CONTINUING STEPS

To build inclusive teams, time needs to be dedicated toward intentional inclusion at first contact. We agree with Chatman and Flynn's (28) conclusion that earlier meetings at a more leisurely pace may stimulate creative, high-quality ideas toward a task more than experiencing pressure of a deadline with lower-quality output. As we encouraged tapping into our personal and cultural identities, cognizant of this in our community to realize our innate and cultural health, an important additional outcome was also anecdotally noted—growth in our science communication skills. As culturally well individuals aware of our own backgrounds, and recognizing the diversity and richness present in other cultures, we worked toward developing our group and individual wellness by interacting with others through listening, observing, understanding, and respecting diversity. With our larger STEM project timeline, it was valuable as a first goal to start effective co-mentoring, writing this inclusive collaborative paper, discussing Institutional Review Board (IRB) approval obtained for this paper, and development for future studies. Did we fall into normative patterns? Probably, but we also communally shared others' challenges and weathered some storms, and our community endured as we continue working toward our STEM project without a fixed deadline. Starting the conversation takes time and, if done well, lends itself to better outcomes in community health. Through our community, we were able to raise the critical mass of underrepresented voices. We advocate that when we learn to not only “start the conversation,” but also develop, apply, and share skills and sustain community, we are developing social capital which leads to increased health and well-being and becomes a mechanism for cultural wellness and retention in STEM.

### SUPPLEMENTAL MATERIALS

Appendix 1: Inclusive strategies and practices

Appendix 2: Sample template

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