

Overcoming Immunities to Change:**The ADVANCE Immunities to Change (ITC) program at Virginia Commonwealth University**

Maike I. Philipsen¹, Penelope McFarline², Ana L. Mills³, Jennifer J. Reid⁴, Deborah Helsing⁵,

Denise M. Grothues⁶, and Susan G. Kornstein⁷

¹Department of Foundations of Education, School of Education, Virginia Commonwealth University

²Human Resources Department, Virginia Commonwealth University

³Department of Physical Medicine and Rehabilitation, Virginia Commonwealth University

⁴L. Douglas Wilder School of Government and Public Affairs, Center for Public Policy, Virginia Commonwealth University

⁵Minds at Work

⁶Office of Research Development, Massey Cancer Center, Virginia Commonwealth University

⁷Department of Psychiatry and Institute for Women's Health, Virginia Commonwealth University

**Author Note**

We have no known conflicts of interest to disclose.

Correspondence concerning this article should be addressed to Maike Philipsen, Oliver Hall, School of Education, Virginia Commonwealth University, 1015 W. Main Street, Richmond VA 23284-2020. Email:

miphilip@vcu.edu

**Overcoming Immunities to Change: The ADVANCE Immunities to Change (ITC) program
at Virginia Commonwealth University**

“Yesterday, I was clever, so I wanted to change the world. Today, I am wise, so I am changing myself.” (Persian Poet Rumi)

Consistent with Rumi’s quote, the National Science Foundation (NSF) ADVANCE grant program is based upon the premise that change toward increased representation and advancement of women in STEM careers begins *within*: within our own institutions of higher education, and the structures, policies, programs, cultures and individuals that define and inhabit them. And yet, change in academe is slow and difficult, as those engaged in ADVANCE work have experienced over and over again since the program was established in 2001.

The difficulty inherent in institutional change is well documented by the literature, which is littered with examples of institutional initiatives stalled by various forms of resistance to change, beginning with the seminal work of Lewin (1951), followed chronologically by such theorists as Argyris (1985), Bennis et al. (1985), Senge (1990), and Heifetz (1994). What their work has in common is the central principle that, in order to make change happen, one must identify and then systematically remove barriers. However, as anecdotes among those engaged in institutional change efforts attest, removing barriers to change in a systematic fashion can be very difficult.

This difficulty may be explained by the concept of *immunity to change* (ITC), which was introduced by social psychologists Robert Kegan and Lisa Lahey (2009). They found that merely recognizing barriers to change is often not enough, even in cases where individuals and groups are truly committed to change. The barriers may be hard to discover and even harder to

overcome. They may exist for valid reasons and be indicative of “immunities to change.” These immunities stem from competing commitments and hidden assumptions that serve to protect us against any perceived possibilities of loss or threat involved in change but also then undermine our change goals. Individuals, as well as teams or entire organizations, can find themselves “stuck,” trying their best to change and yet continuing to engage in behaviors that undermine the change goal.

When the ADVANCE team at Virginia Commonwealth University (VCU) conceptualized the ADVANCE Institutional Transformation grant proposal, we realized that our institution appeared to share the problem described by Kegan and Lahey (2009). We had plenty of documentation that expressed our commitment to diversity, as stated in a series of diversity, equity and inclusion (DEI) strategic plans that were supported by multiple efforts aimed at realizing that goal, like workshops, committees, and other initiatives. And yet, when we looked at the statistics of our faculty composition, it was obvious that, in STEM disciplines particularly, women continued to be underrepresented.

In addition, university efforts did not seem to consider intersecting forms of oppression, causing individuals to get “lost in the numbers,” as Torres (2013) revealed to be the case in other institutional discourses about gender equity. Therefore, we realized that transformative diversity work required a deeper and more comprehensive institutional commitment and a novel approach.

To VCU’s credit, the institution now exceeds the national average for number of STEM women across an array of intersecting identities. At VCU, however, merely surpassing the national average is not enough. Our public urban university is among the most diverse higher education institutions in the state, measured by key student demographics, such as gender, race and ethnicity; in fact, in May of 2022, VCU was awarded the status of minority-serving

institution (MSI). Yet, our professoriate does not mirror that diversity. While we have a relatively high number of women in leadership positions at the university, we have insufficiently increased the number of diverse women faculty and are not moving them into advanced ranks fast enough. As an organization, we have inadequately engaged in learning or, in the language of Heifetz (1994), we have been engaging in technical rather than adaptive change. Therefore, since we received the ADVANCE IT grant in 2018, it has been our intention to go deeper into the structural and cultural elements that are preventing us from actually transforming our institution. A central element of our work has been the *Immunity to Change* approach, which was designed to enable adaptive rather than technical change.

To be sure, the Immunity to Change (ITC) program at VCU, while arguably being the most innovative, is only one element of the overall grant. Other initiatives are seeking culture, policy, and procedural change through their foci on strengthening recruitment and retention processes, promotion and tenure policies, career-life integration policies and practices, and department chair/faculty professional development and community building. This article, however, focuses specifically on the story of the ITC program at VCU to date: the theoretical foundation, design, and implementation of the program, and our grant-wide activities, successes, and challenges. We provide evaluation data and early impact data. We also share lessons we learned, sometimes hard lessons, when lofty ideals had to be translated into change work on the ground, when academics of various disciplines had to find ways to talk to each other, and when so-called “touchy-feely” concepts about hidden beliefs and unexamined assumptions were carried by individuals from psychology or education into the STEM world.

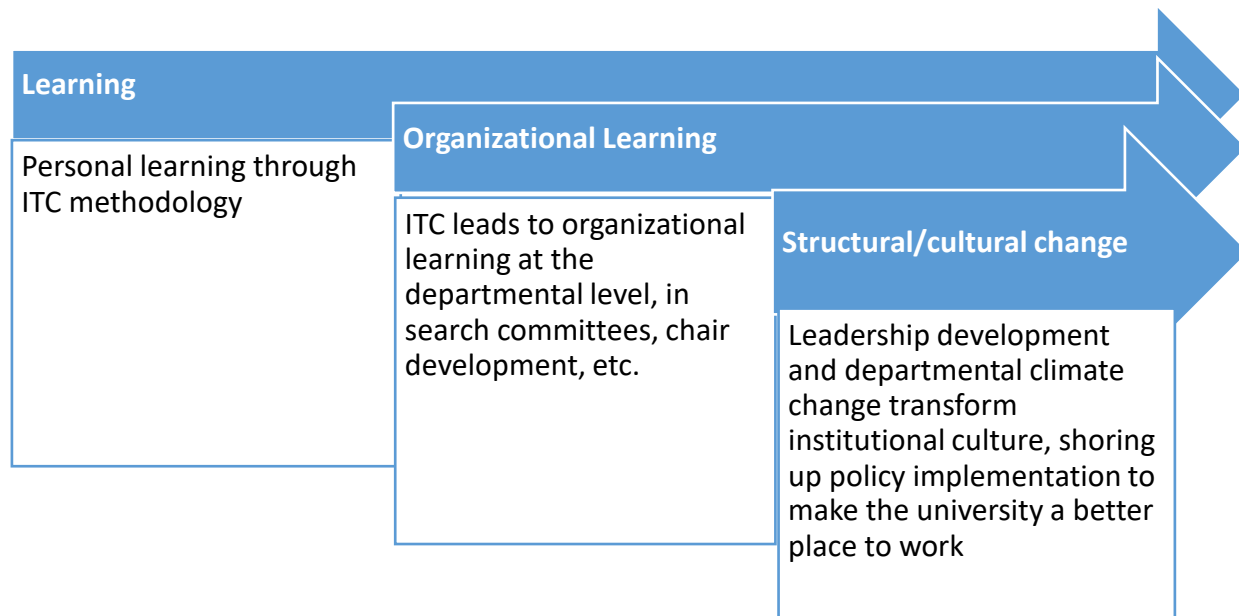
The purpose of this article is to share our story with those who share our mission, namely, to make academe a more equitable and supportive place for diverse women. We are introducing

a cutting-edge approach to DEI efforts in academe, one with the potential to add new understanding of individual and collective mindsets that get in the way of effective institutional change.

In the sections that follow, we will: (1) explain the *theory of Immunity to Change*, where it is situated in the change literature, and how it works; (2) describe how we have used ITC at our institution (VCU); (3) share evaluation and impact data; (4) communicate lessons learned; (5) and conclude with recommendations for others.

Organizational Change Strategy: The *Theory of Immunity to Change (ITC)*

VCU's challenges to organizational change are not unique; in fact, one could argue that as a relatively young and dynamic university, VCU may be in a better position to make change happen as compared to institutions steeped in longer traditions. Structural inequities and change-resistant cultures are widespread in higher education, despite change strategies aimed directly at these challenges (Ahmed, 2012; Kezar, 2018; Patel, 2021). Therefore, our approach is based on the premise that for transformative change to occur, we must first work on what makes resistance to change so intractable. As noted in the introduction, we followed the ITC model of Kegan and Lahey (2009). Figure 1 provides a graphical representation of our approach.

Figure 1.*Institutional transformation through ITC*

Grounded in the belief that the ownership of VCU's seemingly intractable problem rests with the whole academic community, the ADVANCE-VCU team is deploying the ITC process as a catalyst for transformative learning at VCU (Kegan & Lahey, 2009; Revens, 1982; Revens, 1983). Through the ITC process, VCU community members learn how they contribute to creating immunities through competing commitments, an unconscious defense mechanism that protects the organism from a perceived threat. Awareness that an immunity can stall or prevent desired progress unleashes the potential for genuine, transformative change (Torbert, 2000). We use the term "transformative" quite deliberately. Kegan (1994) and Torbert (2004) have noted that new perspectives allow something that was previously unseen (the competing commitment) to become visible and, therefore, actionable.

The ITC process is grounded in Robert Kegan's theory of the evolution of consciousness in adulthood (1982, 1994). Kegan's theory illustrates an evolution of the self that begins at birth

and continues throughout adulthood, focusing on the deep structures that govern our meaning making (Kegan, 1982, 1994). These deep structures can evolve or transform in a predictable direction—toward greater and greater psychological complexity.

Transformations involve renegotiating what Kegan calls the subject-object relationship (1982, 1994). When we can take something as “object,” we are able to reflect on it, call it into question, and make choices about it. “Subject” refers to what we are unable to question or reflect on, beliefs that shape us because we unquestioningly assume them to be true. In an ITC map, identifying unconscious fears, hidden commitments, and “big assumptions” provides a means for participants to move these phenomena from “subject” to “object.” To be clear, transforming something from “subject” to “object” is not the same as objectifying—treating a person like a thing. Instead, it is a way to make explicit the beliefs we have been automatically operating with, in order to question, evaluate, and potentially revise them. The more we can take as “object,” the more choices or possibilities are available to us because we can name, identify, revise, and organize more than we could before. We are able to include and integrate our beliefs within a psychologically more complex framework.

While most ITC participants are primarily motivated to make progress on specific goals or improvements, their work through the process and toward their goals can transform their meaning-making systems in the direction of greater complexity (Kegan & Lahey, 2009). Research (see Helsing & Howell, 2014, for a summary) demonstrates that developing in these ways corresponds to leaders’ improved effectiveness, especially as the tasks they face at work increase in complexity. Organizations can use ITC as one powerful lever to support the ongoing development of their employees and improve organizational performance (Kegan & Lahey, 2016). In the case of VCU, we are using ITC to support individuals and units (e.g., departments

and search committees) in developing their beliefs and changing their behaviors related to faculty diversity. More specifically, we employ ITC to help individuals and units reach their improvement goals that are focused on recruiting, retaining, and supporting faculty from diverse backgrounds.

According to Kegan and Lahey (2009), transformative change begins with a group of people identifying the competing commitments that undermine what they want to accomplish. Taking action to weaken the power of a group's competing commitments, then reflecting on and evaluating the impact of that action, leads to organizational learning (Argyris & Schon, 1997). Organizational learning, in turn, leads to cultural change through changes in shared experiences, perspectives, and norms (Schein, 1990). Development of both formal and informal leaders produces structural changes that will be supported by the evolving culture (Bochman & Kroth, 2010; Schein, 1990). Based on decades of research on adult learning, professional development, leadership, and change, Kegan and Lahey (2009) argue that individual beliefs and collective mindsets of organizations work together to create immunities to change. They have designed a five-step process that diagnoses such immunities. Here is an example:

Step 1: (Identify an improvement goal): The university is committed to spousal/partner hiring because it gives the institution a competitive edge in recruiting and retaining diverse high-quality faculty.

Step 2: (Identify behaviors that undermine the goal): Faculty balk at the prospect of having the “trailing” spouse or partner “dumped” on the department.

Step 3: (Identify the fear that drives this behavior): Faculty worry that they lose autonomy in selecting the most qualified candidate for a faculty position if a spouse/partner is hired.

Step 4: (Identify the competing commitment at work): Faculty are also committed to not risking the loss of their autonomy in hiring and in assessing each candidate's merit.

Step 5: (Identify the "big assumption" behind this immunity to change): Spousal/partner hiring will lead to erosion of faculty quality.

The five-step process is usually captured on an immunity map (see Appendix A). The process is, therefore, called "mapping." Once the map has been constructed, and the diagnosis of an immunity to change completed, participants test the validity of their "big assumptions" and learn if and when their fears might be unfounded. If they no longer need to protect themselves from danger with their competing commitments, they can then take their foot off of the brake, changing their behavior and making progress on their initial change goal. Consequently, they are better able to effectively address this particular immunity to change (Bowe et al., 2003). This second part of the process is called testing, and each step of the testing process is captured on a template as well (see Appendix B).

ITC Applied at Virginia Commonwealth University (VCU)

Our work, beginning in 2018, sparked the interest of Lisa Lahey who, along with Robert Kegan, co-created the ITC framework. She co-founded [Minds at Work](#), an organization that trains ITC facilitators and coaches in the change methodology to help individuals and organizations around the world accomplish their change goals. Lisa Lahey and her colleague Deborah Helsing signed on to train our ITC facilitators.

We trained and deployed two cohorts of ITC facilitators who became proficient at using the mapping and testing processes described above. They are working with departments, search committees, and other groups to address barriers to recruitment, retention, and advancement of diverse women faculty. Each cohort consists of approximately 20 individuals, one cohort trained

in the summer of 2019, and the second in the summer of 2021. About half of the first cohort of ITC facilitators elected to continue the work and joined the second cohort, a testimony to the value they placed on the process. These veteran members of the second cohort have proven to be invaluable for the ITC work; they have served as peer mentors, and some have taken on leadership positions within the VCU ADVANCE grant management structure.

In spring of 2019, we accepted applications from individuals across the university, including faculty, administrators, and staff. We used several criteria during our admissions process, intentionally selecting a group that represented diverse disciplines, units, ranks, and experiences. The cohort went through intense training during the summer of 2019, including readings, online and in-person workshops with Lisa Lahey and Deb Helsing, and practice assignments followed by detailed feedback. At the same time, the lead author of this article, Maïke Philipsen, completed a rigorous coaching program at Minds at Work and earned her ITC coach certification in the spring of 2020. She was thus able to assist in the training of the ITC facilitators. The ITC work is supported by an advisory committee that meets monthly and consists of a diverse group of eight individuals engaged in various forms of diversity, equity, and inclusion (DEI) work at the university. The group was initially directed by Maïke Philipsen and then co-directed by Penny McFarline and Ana Mills, co-authors of this article.

ITC facilitation sessions began in 2020, initially hampered by the pandemic outbreak in the spring of 2020. We were able to pivot, however, and take our work online. As mentioned above, in the summer of 2021, we recruited a second cohort of ITC facilitators, trained in much the same way as the first.

All in all, our ITC facilitators have worked with STEM and non-STEM departments as well as search committees, for a total of 22 engagements thus far. The typical process consists of the following steps:

Preliminary conversations

The leader of a unit (such as department chair or search committee chair) and one of the leaders of the ITC program discuss the improvement goal a unit may have. This is typically a goal related to faculty recruitment, retention, and advancement but has occasionally been more generally related to the climate of a unit. It is important that the goal meets certain criteria in order to be suitable for an ITC mapping exercise: most significantly, the goal needs to be important to members of the unit, and they must feel that they have control over achieving the goal. Other relevant information discussed at that first intake meeting includes relationships and dynamics within the unit, as well as any potentially sensitive history worth knowing.

Logistics

Once the goal has been articulated, we work on logistics, i.e., recruiting ITC facilitators for the mapping/testing session(s) and finding dates and times. Facilitators work in pairs, one responsible for facilitating the mapping process and the other serving as a scribe.

Pre-session

A member of the ITC team meets with the ITC facilitators who have signed up for the actual ITC mapping/testing session and helps them prepare through simulation and practice. Specifically, the facilitators are invited to practice making a map based upon the established improvement goal of the unit.

ITC facilitation session

During the session, the facilitator guides the unit through each column of the map (Appendix A). **Column one** lists the improvement goal. For example, a STEM department identified their improvement goal as “getting better at reaching more diverse faculty candidates for faculty searches.” In conversation, the group further defines what is meant by “diverse,” i.e., gender, sexual identity, race, ethnicity, nationality, etc. For **column two**, the facilitator invites the unit to list common behaviors that undermine the goal in column one. What, in other words, are behaviors of “doing” and “not doing” that go against the goal? In our example, department members listed “not recruiting hard enough,” “not advertising to more places and conferences,” and “only evaluating candidates based on publications and grant funding.” Once these behaviors have been established, the team moves to **column three**. They are asked to imagine doing the opposite of column two behaviors and share the worries they feel when imagining this. In our example, the department members shared that they worried that, if they “recruited harder,” “a lot more time will be committed to performing the task, and that takes away from other commitments.” They also worried that “if they changed evaluation criteria for candidates, the candidates won’t be successful at bringing in grant money.” From these worries, the facilitator helps the group see the commitments they have that compete with the column one goal. These are commitments to protect themselves from facing—or even feeling—their worries. In our example, members of the department shared that while they are committed to reaching more diverse faculty, they are also committed to “keeping the status quo and not rocking the boat” as well as “protecting [their] personal time or tasks that [they] are already doing.” So, in this example, the facilitator is able to show the group that they may well be committed to their column one goal—wanting to reach more diverse faculty candidates for searches—but they also

have competing commitments of not rocking the boat, not challenging the status quo, or not losing any personal or work time. The department team is encouraged to express their worries and commitments in ways that are not noble but rather candid, potentially embarrassing, or even “yucky” to admit. Commitments that have to do with image, status, and seemingly selfish goals often come up. It is at this point that the team usually begins to have “aha moments” where members realize some of the dynamics that are getting in the way of achieving their column one goal, in this case, reaching more diverse faculty for faculty searches.

The **last column** invites the group to look at the entire map and ask themselves what assumptions they must be making that make change so difficult, feeding the column three worries and commitments that lead to the behaviors listed in column two, which in turn, undermine the improvement goal of column one. What is the group afraid of? What is the “big bad” they must be assuming would happen if they let the column three competing commitments go? In our example, the department said they realized they must be assuming that “if we changed evaluation criteria, we will not reach the best candidates” and, if they served on the search committee, “[they] are adding more work that is taking too much away from other commitments.”

Once the map is completed, the group is invited to design tests of their big assumptions in order to collect data that, simply, disconfirm their big assumptions. What if they find out that their big assumptions are not accurate, or at least not entirely accurate? Collecting these data through testing enables the group to let go of their competing commitments; it will lessen the worries listed in column three and, therefore, make it more likely they will not engage in column two behaviors that undermine their column one goal. Not engaging in these counterproductive behaviors, in turn, will make it more likely that they will actually reach their goal. An example

for the department described above would be to test the assumption that changing evaluation criteria will not reach the best candidates by designing thoughtful criteria that will be both inclusive and set high standards to ensure high quality candidates. Another test would be to consult the literature on inclusive hiring or speaking with colleagues in departments that had successful searches reaching diverse candidates. As mentioned above, our ITC facilitators worked with departments, both STEM and non-STEM, search committees, and individuals. Some examples of these search committee goals include “getting better at holistically reviewing applicants” and “developing a highly qualified, diverse recruitment pool,” while examples of departmental goals include “taking a closer look at our hiring practices as they relate to POC [people of color] and/or women for both faculty and staff positions” and “communicating more openly with one another.”

One search committee discovered that they often subconsciously assumed that only a candidate whose academic pathways, qualifications, and pedigree looked “safe” and “traditional” could be successful in this job and at this institution and, if they did not choose such a person, they would open themselves up to criticism from their colleagues. This group designed simple tests to shed light on their assumptions and, for example, asked colleagues who were not on the search committee about what they considered markers of success, rather than making assumptions. They sought to find out what colleagues actually want in a position and whether they truly had preconceived notions. Along similar lines, they designed a test to question their assumption that only a faculty member whose background and qualifications look “safe and traditional” can be successful at this institution. This test consisted of talking to successful colleagues and finding out about their backgrounds and listening to their experiences that

enhanced the success they had at the institution. This process allowed the group to discover just how inaccurate their assumptions were about “non-traditional” faculty.

We have found that, even if the committee does not have enough time to design and/or engage in testing, the very process of map making to diagnose immunities to change can be a powerful vehicle. Teams begin to realize and discuss in candid ways profound insights and revelations. They begin to see why, despite their commitments and best intentions around faculty diversity, they may collectively engage in behaviors derived from hidden commitments and often invalid assumptions that get in the way of their goals. Specifically related to intersectionality, the literature has demonstrated that individuals with intersecting subordinated social identities face more adverse effects from implicit or unconscious bias than others (Ogungbe et al., 2019) and are, therefore, penalized by “overlapping and interdependent systems of discrimination and disadvantage” (Mehrotra et al., 2022). The mapping process provides units with opportunities to interrogate the ways in which their assumptions reflect these dynamics.

Debriefing

After each mapping process, the ITC facilitators meet with members of the ITC team to debrief. In addition, the ITC team has offered many sessions of continuing professional development for the ITC facilitators, including map making and testing practices, simulations, fishbowl exercises, and information on how to navigate difficult conversations.

Evaluation Data

Multiple complementary evaluation frameworks—process, outcome, and impact—were used to assess the ITC workshops since this was its first implementation in academia. Evaluation activities and questions were guided by a Theory of Change model created for the ITC initiative before its implementation. The purpose of these assessments was threefold: (1) to provide

feedback on facilitators' ability; (2) to understand the perceptions of and immediate outcomes for participants; (3) To examine the long-term outcomes experienced due to participation. The project evaluator collected this information through web-based or paper-pen surveys, with process and outcome data collected immediately after the ITC workshop and with impact data collected six months after. Data collection, including qualitative interviews, is ongoing.

Evaluation Results on Mapping Sessions

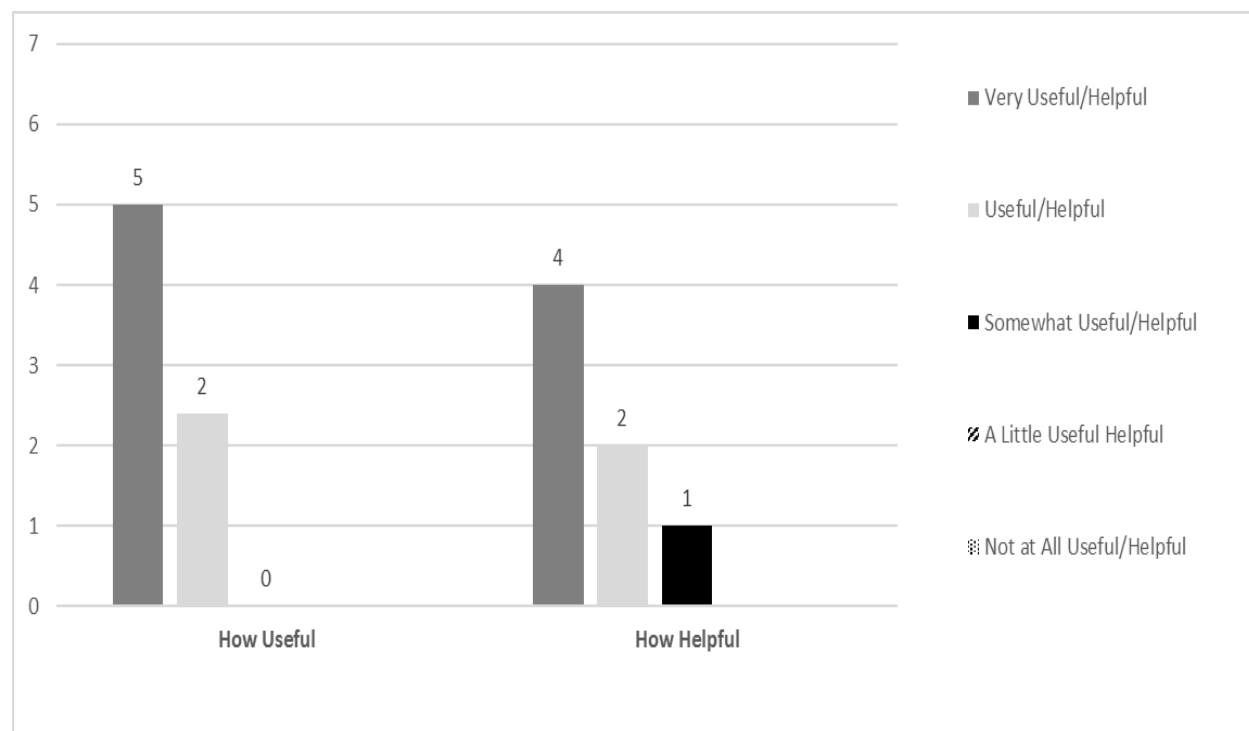
ITC mapping sessions were conducted with 11 departments, a special interest group of educators, and two search committees across the university's academic and medical campuses. Evaluation data were collected from 155 faculty members concerning their perceptions of the training and outcomes they immediately experienced after the training. Data were collected from the fall of 2021 until the winter of 2023. Response rates ranged from 32% to 100% survey participation of workshop attendees.

Responses to questions were either a 5- or 7-point Likert scale, with the highest number being the most favorable response and the lowest least favorable. In addition, due to some changes made in the workshop surveys, some questions were not asked of each department. Though process evaluation data were collected, for the purpose of this paper only outcomes from participation will be presented.

Search Committee Responses. Two search committees participated in the ITC workshops, though only data from one will be presented due to the low response rate from the other. Seven of the eight participating members responded to the survey, giving the workshop an overall positive rating (Figure 2).

Figure 2.

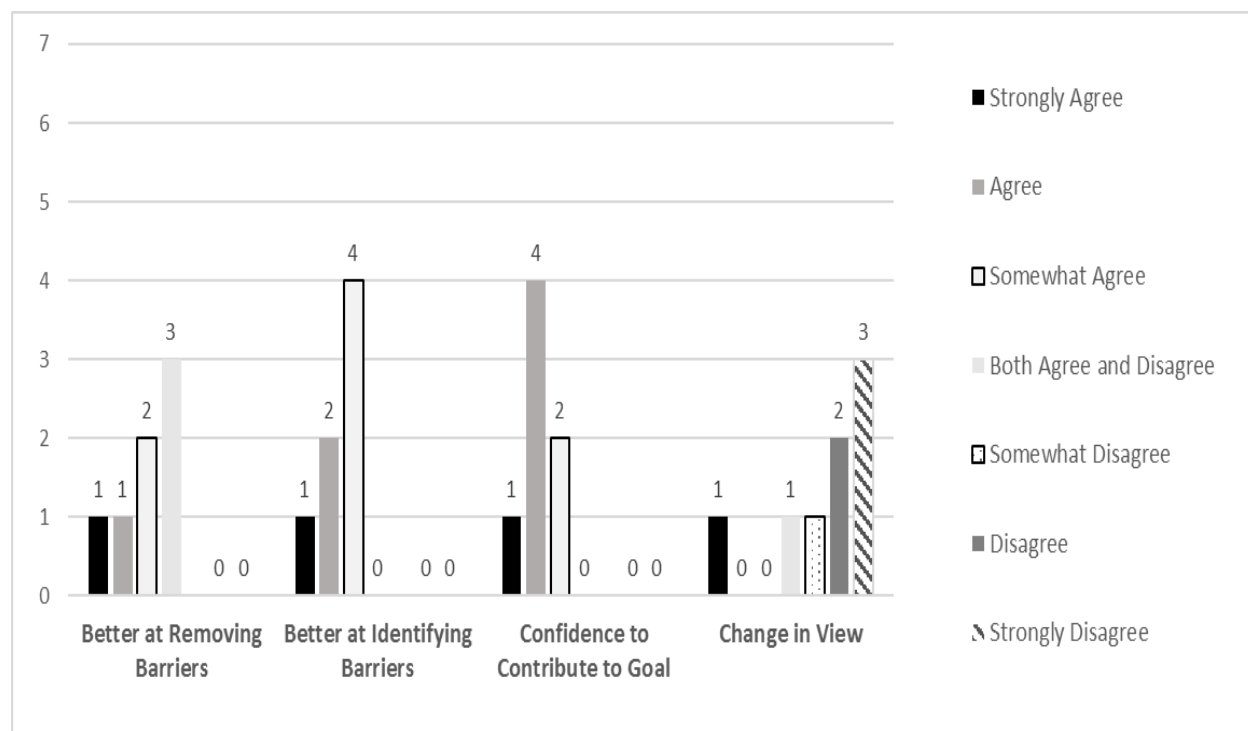
Number of Responses for “How Useful” and “How Helpful” was the ITC Search Committee Workshop



When asked a series of questions on how they had changed, most agreed or strongly agreed that they had greater confidence in achieving their equity goals (Figure 3). The rest of the responses were positive, except for the response about changing their views regarding diversifying faculty, which was solidly “somewhat disagree” to “disagree” (Figure 3). However, all were at least “likely” to recommend the ITC tool to other committees or academic leaders, with most (57%) indicating that they felt the exercise had influenced the work of the search committee “quite a bit.”

Figure 3.

Number of Responses for Level of Agreement on Change Statements for Search Committee

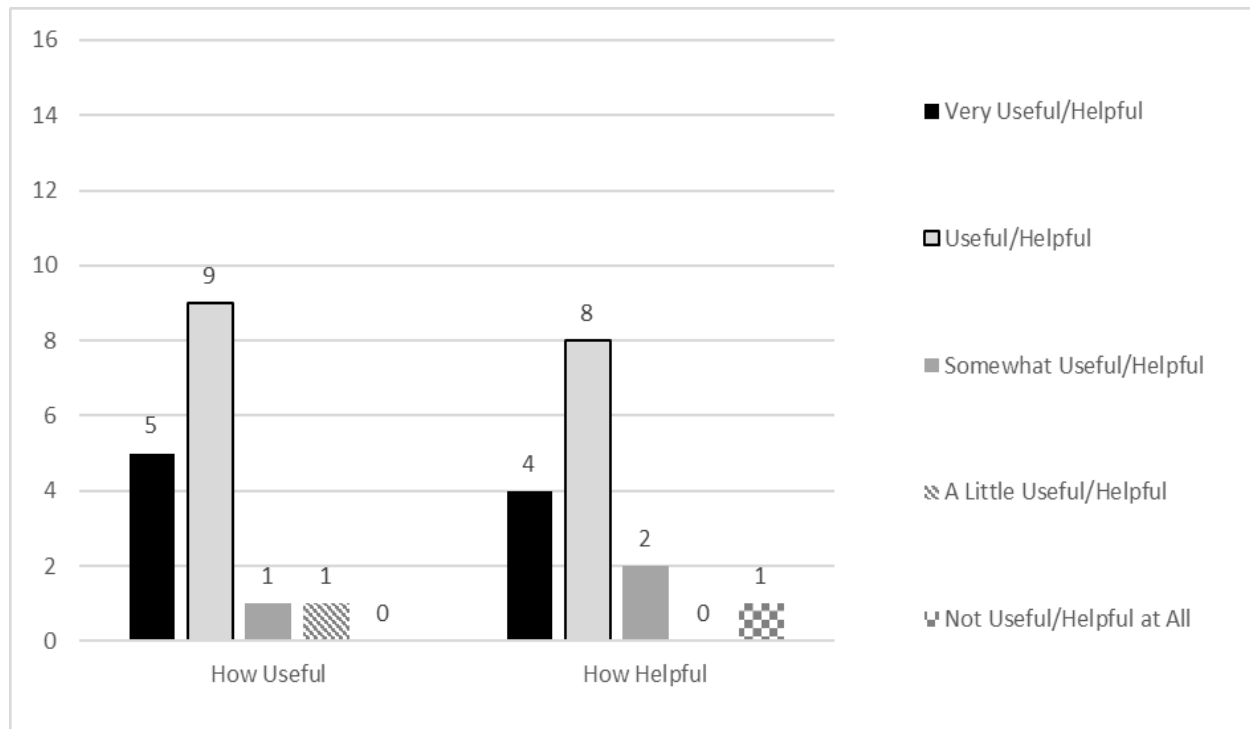


Although representing only one person, a final comment shared on a survey indicated that ITC had them “thinking differently” concerning their views on “what makes a successful candidate.”

Teaching Group Responses. ITC facilitators conducted a workshop with 23 faculty members working to better understand their immunity to change regarding becoming a leader/advocate in inclusive learning, meaning pedagogies that increase individuals’ sense of belonging and value within the classroom. Sixteen faculty members completed the evaluation, although not every respondent answered all questions. When asked about the overall usefulness of the ITC mapping exercise, and whether it was helpful in better understanding the barriers to change, 16 out of 16 survey participants responded that it was useful to some degree, and 14 out of 15 indicated it was helpful to some degree (Figure 4.)

Figure 4.

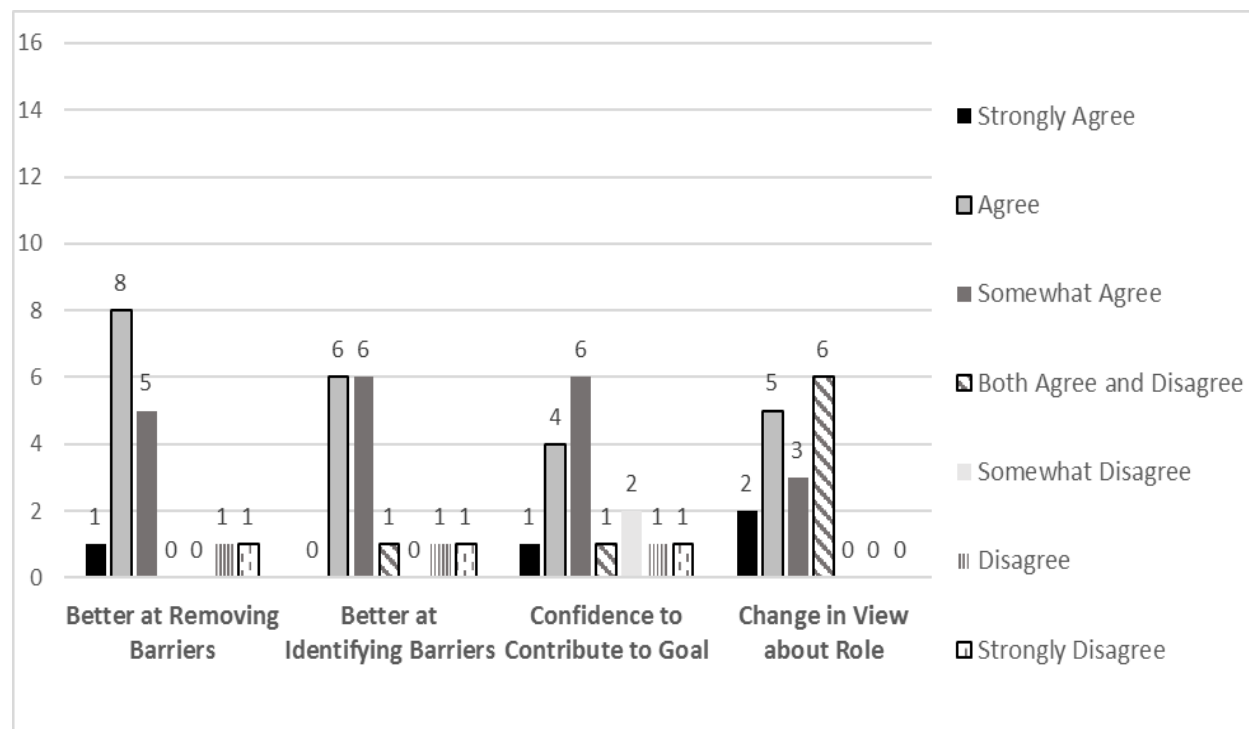
Number of Responses for “How Useful” and “How Helpful” was ITC Workshop for Teaching Group



Most of the survey participants also agreed that the ITC engagement helped them become better at removing barriers to equity and inclusion (Figure 5). There was greater variance in group responses about other changes: identifying barriers, confidence in achieving their equity goals, and their role as agents of change.

Figure 5.

Number of Responses for Level of Agreement on Change Statements for Teaching Group



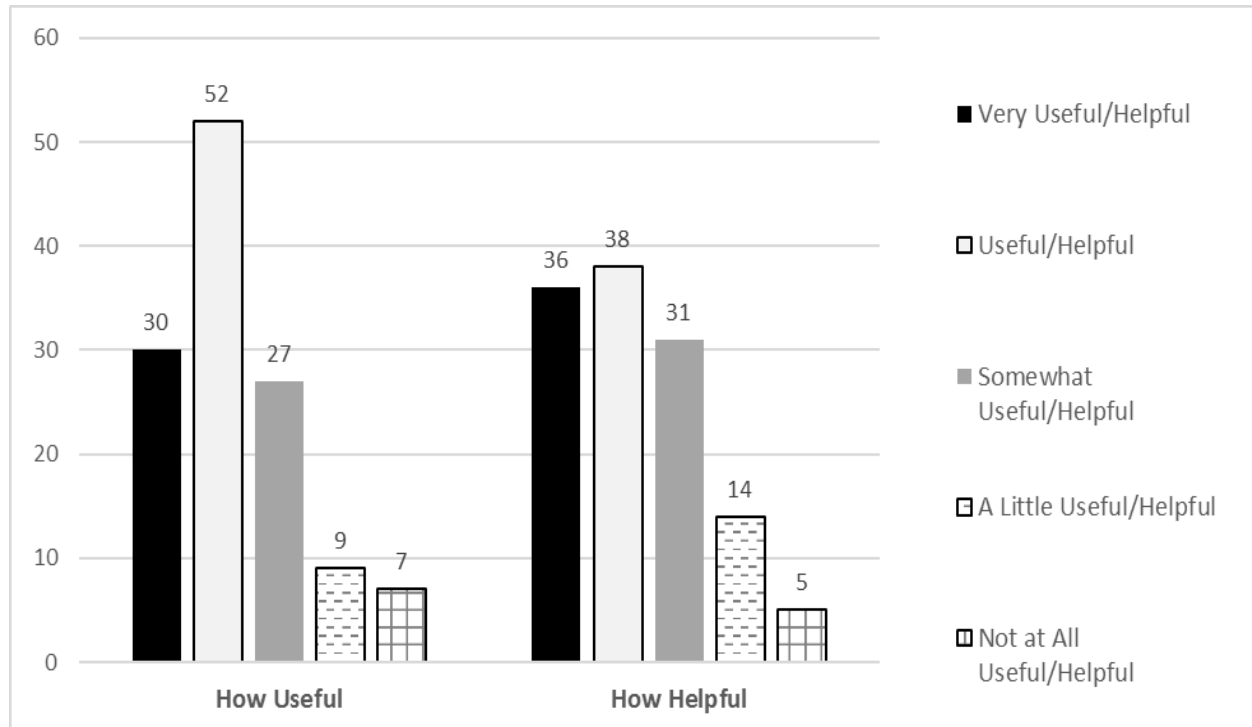
Comments from the survey indicated that group members felt that ITC helped them figure out what was “stopping them from making the change they wanted” and “mobilized” them to act by reminding them of their skills and abilities. Most comments indicated that, without going through the ITC exercise, faculty were not sure if they would have taken the time for this level of “introspection” and “self-reflection,” as well as the exercise being “thought-provoking.” One member said the exercise had a “huge impact” on them, making them confront fears about being “capable/qualified/competent” enough to be a leader. It is important to note that two members had doubts about being able to test their assumptions successfully.

Departmental Responses. Eleven departments participated in an ITC workshop, of which 57% (n=127) of faculty answered a post-evaluation survey out of a possible 224 attendees. ITC workshop participants found the experience to be “somewhat useful” to “useful,” with a

similar response to how helpful they found the workshop (Figure 6). Some departments were asked to share what they found most and least useful about the workshop. Most comments indicated the workshop's usefulness was that it increased individuals' awareness of "coworkers' thoughts and feelings," as well as allowing them to identify "fears," "behaviors," and "views" that have been getting in their way of achieving their goals. In addition, many individuals realized that they had similar "worries" or "fears" as their colleagues, which led to an increase in feelings of "connectedness." Less consensus is seen across the comments left about what they felt was least useful, though many said that they "needed more time" and were "confused" at different times, while some were left wanting more "resolution" around what was brought up in conversations.

Figure 6.

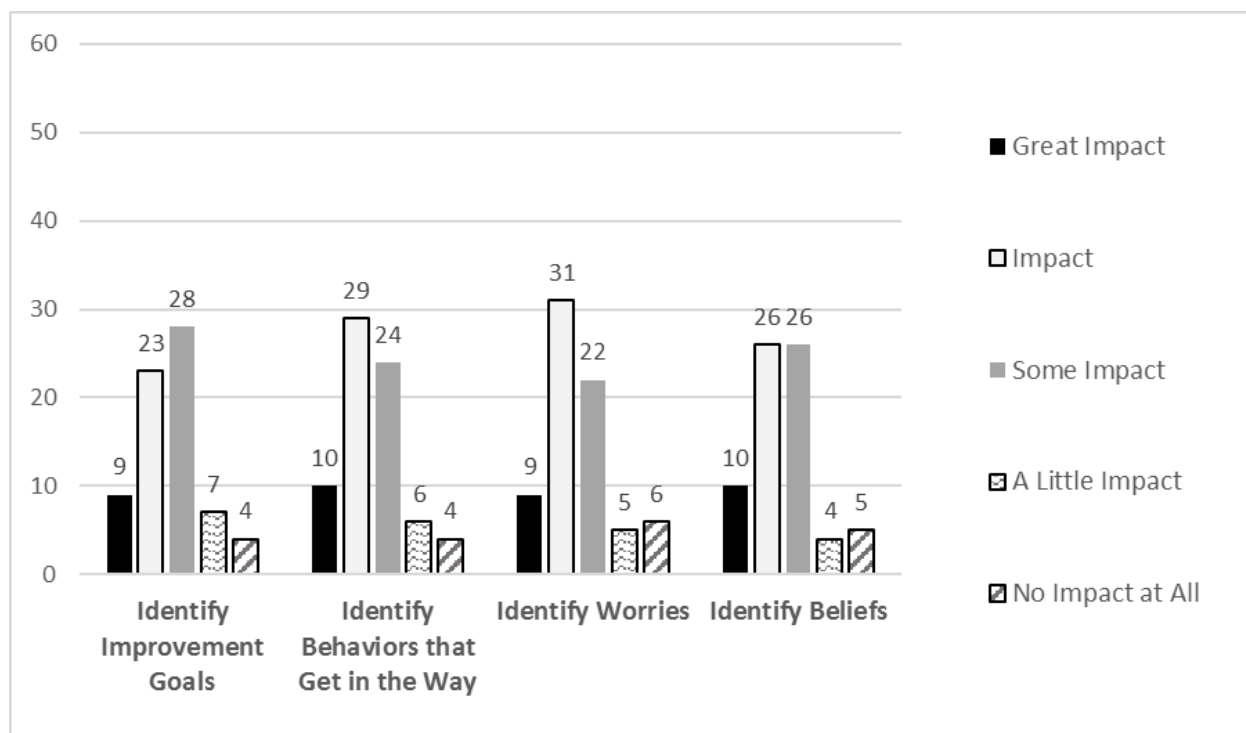
Number of Responses for “How Useful” and “How Helpful” was ITC Workshop for Departments



The next set of questions asked about the level of impact each part of the exercise had on participants’ beliefs concerning their diversity and inclusion goals (i.e., goals around diversity and inclusion differed across departments). A large majority of those surveyed felt that the ITC exercise had at least some impact on creating improvement goals and identifying barriers, worries, and beliefs that often hamper DEI change (Figure 7).

Figure 7.

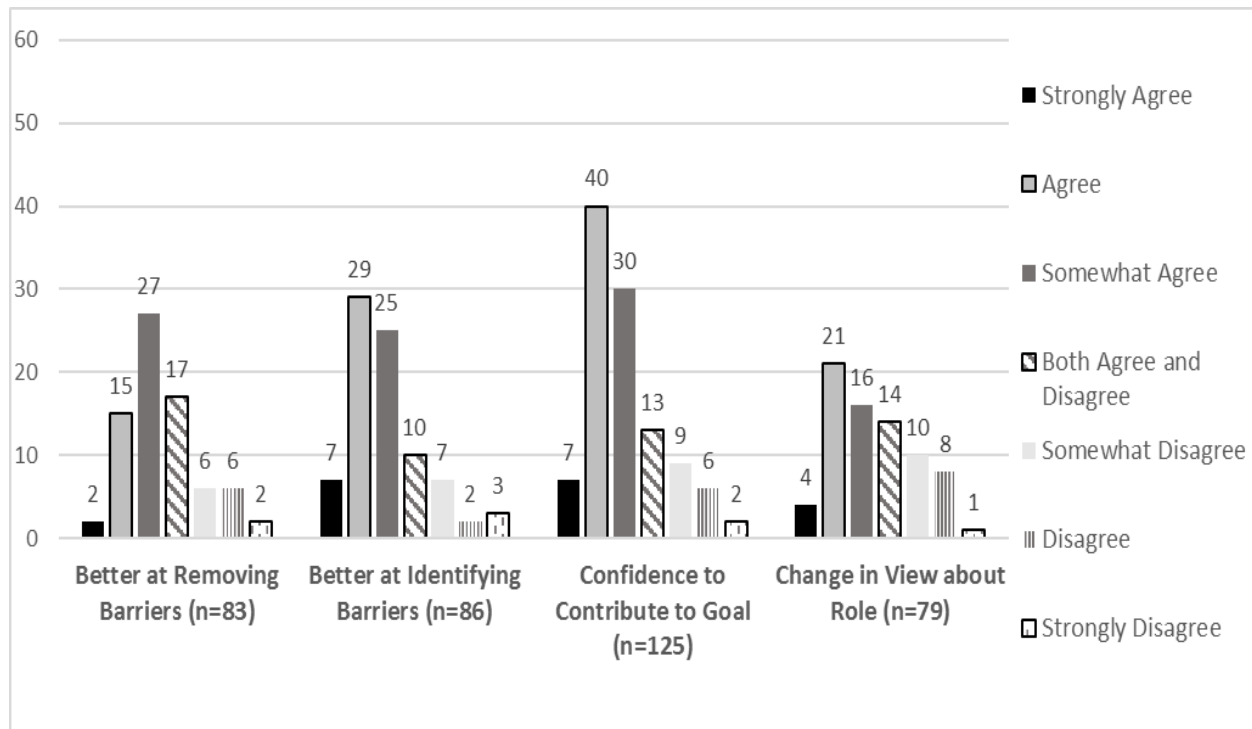
Number of Responses for Level of Impact Each ITC Activity Had for Departments



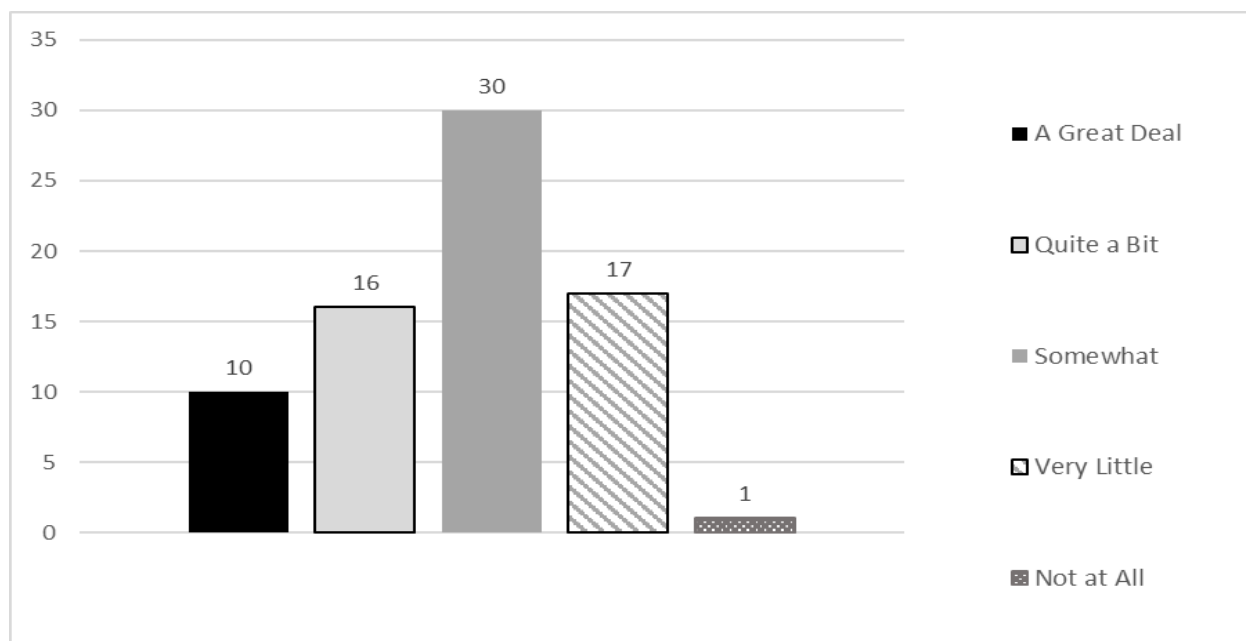
Workshop attendees were then asked to provide their level of agreement with four statements related to barriers, goals, and roles (Figure 8). Most attendees answered either “somewhat agree” or “agree” to the statements on identifying barriers and confidence in achieving their goals, while responses to removing barriers and changes in views about their roles were more mixed (Figure 8). Further analyses disaggregating these data by individual department may help explain these diverse responses.

Figure 8.

Number of Responses for Level of Agreement on Change Statements for Departments



At the end of a workshop, attendees reported being impacted by ITC in relation to their ability to make changes within their departments concerning inclusion and diversity (Figure 9). However, when asked about how much this helped their department with its improvement goals, attendees were less optimistic about change, giving the response of “somewhat.”

Figure 9.*Number of Responses for Help to Department*

Note: Question was added later in administration, so only answered by eight of the 11 departments (n=88)

Most attendees left positive comments when asked if there was anything else they would like to share. Individuals talked about an increase in “awareness” as well as the “realization” of what they can do as an individual. It is important to note that not all comments were positive, with some attendees expressing that they did not see the “need” for ITC in their department and that the “barriers” discussed were not barriers for them. Others talked about feeling “frustration” because the real barriers were “structural” and “outside” of their ability to change, showing that not all attendees saw the purpose or felt the impact of the workshop.

Impact Data: Six Months Out

Impact surveys were sent to 91 individuals who participated in an ITC facilitation session. Of the 91 individuals, 33 responded to the survey, with a response rate of 36%. Not all

individuals who participated in an ITC workshop were sent an impact survey due to missing contact information.

The first group of questions on the survey focused on personal impact. When asked about the impact that the workshop had on their views and behaviors, 50% (n=17) indicated that participating in ITC changed their views, with 43% saying their views changed “a good deal” or “some.” All changes in views were reported as being positive. When asked about changes in behaviors, a slightly smaller percentage (46%) indicated that participating in ITC changed their behaviors (n=15). The majority (62%) of participants said their behavior changed “some.” It is important to note that almost a third of participants who reported behavior changes shared that their behaviors changed “a good deal” or “a great deal.” Similar to their views, all participants indicated that their behaviors positively changed.

This set of questions was followed by an open-ended question that asked participants to qualify their changes. Open-ended comments included words such as “self-awareness,” “being open to new viewpoints,” “developing a better understanding . . .”, “becoming aware . . .”, “thought process . . .” and “knowing the opinions . . .” Those who left comments (n=11) talked about changes in views, not behaviors¹. Comments that were left indicated that participants had a greater awareness of views and beliefs that were creating barriers, impeding their ability to achieve their workshop goal. In addition, comments indicated growth in understanding of others and an increase in views occurred through the discussion around the ITC mapping exercise.

¹ Individuals were able to check more than one type of workshop, which is why the total number is 47.

The following questions on the impact survey focused on changes in views and behaviors within one's department/unit or team/committee; 15 participants completed these questions. When asked if ITC caused department-wide changes in views, the majority of respondents said "no" (73%). Of those who responded "yes," 60% reported "some" change in view, while 40% reported "a good deal." Of those who responded yes, the vast majority of respondents indicated that views had positively changed within the department, with only one person sharing that they felt the change in views was both "positive and negative."

A similar percentage reported behavioral changes within their department (73% "no"; 27% "yes"). Those who said behaviors had changed "a good deal" or "some" indicated positive changes. In the open-ended follow-up question, only one person commented. This participant shared a department change they had witnessed within leadership, where changes in behaviors indicated an increase in "awareness" related to their actions.

The final group of questions asked about the impact on a team or group level, which only five participants answered. Of those individuals who answered, four said that ITC changed the views of their team/group. Of these, three stated that there was "some" change, while one reported "a good deal" of change in their views. All five participants indicated the changes in views were "positive." The same results were reported for changes in behaviors. One individual left a comment that said, "We had thoughtful discussions regarding our personal situations about being change agents in our units. I feel seen and heard." There were a few negative comments left, such as "ITC experience was worthless" and "... big challenge with many unspecified details."

These impact results indicate that ITC sessions have a positive impact, though the impact level varied from "some" to "a great deal." In addition, impact data shows us that the power of

ITC lies in changing participants' views by increasing "awareness" related to beliefs or actions that create barriers to achieving their goals.

In summary, evaluation findings from the ITC mapping sessions, which were conducted with 11 departments, a special interest group of educators, and a search committee across the university's academic and medical campuses, revealed that a clear majority of respondents in all of these settings found the exercise to be either "useful" or "very useful." Not surprisingly, responses were varied when participants were asked about specific changes attributable to the sessions. Most of those on the search committee felt more confident that the experience helped them accomplish their diversity goal, though less agreement is found on whether the workshop helped them identify or remove barriers, or made them more effective in their roles. In contrast, most of the respondents from the teaching group responded that ITC helped them remove barriers to change, with less agreement on other changes (such as identifying barriers, confidence in achieving their equity goals, and their roles as agents of change). Finally, responses from the combined departmental data were mixed, none showing majority agreement for any of the four changes, though this should not minimize the positiveness of the evaluation findings (as noted, this is possibly due to variability across the 11 departments).

Of note is the fact that the ITC team has recently engaged with one STEM department, Department X (DX), in ways different from all other engagements. For one, the group chose an improvement goal only tangentially related to diversity, equity, and inclusion ("re-building better community and communication"). They also allocated significantly more time to the workshops, engaged in considerable testing activities in addition to the mapping, and invited the ITC team leader to visit department meetings between ITC sessions to provide updates. While data analysis is ongoing, and a case study will be prepared for a separate publication, we do see very positive

results, with the vast majority of faculty indicating that both their views (67%, n=27) and behaviors (75%, n=30) changed due to participation in the ITC workshop. Even higher percentages say their department had changed in its views (78%, n=31) and behaviors (92%, n=36). While the reasons for what appears to be a positive response to ITC have yet to be carefully analyzed and contextualized, one preliminary conclusion we draw is that ITC impact, unsurprisingly, depends to a large degree on time committed to the workshops.

The following section, Lessons Learned, sheds light on some of the obstacles we have encountered and the steps we have taken to overcome them.

Lessons Learned

Through nearly 22 ITC engagements, we have faced several challenges, have learned from those challenges, and have made changes along the way. The following have been opportunities for the biggest lessons learned thus far.

The Challenge of Comfort and Discomfort

ITC is rooted in theories of adult development and the psychology of learning and change (Kegan & Lahey, 2009). The mapping process leads groups from a place of comfort, even pride in their stated DEI goal or cause, to a place inhabited by worries, fears, and hidden, competing commitments. The last step in the mapping process asks participants to reveal even deeper assumptions that firmly pin their competing commitments in place. “One foot on the gas and one foot on the brake” perfectly describes the paradox that an ITC mapping process is designed to reveal.

1. Discomfort is expected in ITC. We view it as a sign that a group is on the verge of or already having an “aha moment.” However, groups have felt blind-sided and disoriented

by these feelings when they are not prepared for it. Now, we prepare groups for the experience of discomfort before we begin making a map with them. We let them know to expect it. We look for signs of discomfort at key points in the mapping process, acknowledge it out loud, and reinforce the risks people take when they allow themselves to be publicly uncomfortable.

2. STEM professionals tend to be more comfortable viewing change as a logical or conditional process (if X, then Y). The phrase “immunity to change” itself has prompted skepticism about and defensiveness towards the process. We have adjusted our language to characterize mapping as a type of logic model, designed to help groups uncover why they do not progress towards their goals. This language is familiar to STEM departments and reflects a mindset about change that is logical and linear, making it easier to engage with ITC.
3. Some groups that request ITC have already dedicated much of themselves and their time toward building a diverse community and culture of inclusivity and equitable treatment. We found it is important to allow space for people to share their pride in such efforts, even when it is not deliberately built into the ITC process. We now use a lens of appreciation to acknowledge what groups have already accomplished toward their DEI goals. During an ITC map creation, there are specific times when groups may mistake a facilitator’s prompt for behaviors that get in the way of their goal, for a request to share steps taken in support of their goal. It is these moments that facilitators notice and momentarily shift away from the mapping script to acknowledge the group’s good work. Thirty seconds of recognizing sincere efforts and noble intentions helps create an

atmosphere of safety and trust. When we later ask the group to expose hidden fears and less noble, competing commitments, it is easier to do so.

4. The low response rate on impact surveys indicates there may be a need to shorten the time between the end of the program and the impact assessment. Traditionally programs can be assessed three, six, or 12 months after the end of the program. For this project, we will consider decreasing the time between the end of the program and sending out impact surveys to three months, in an effort to increase response rates.

The Challenge of Group Dynamics

No two academic units or search committees are the same. No assumptions can be made about the STEM departments that are the target audiences for ITC work. For example, we have unwittingly stepped on raw, hurt feelings during an ITC mapping exercise when a group's past internal struggles around dynamics of exclusion and feelings of inequity re-emerged. Another example is a conversation we had with two science departments requesting ITC work around seemingly similar goals. One of the departments was grappling with an adaptive change and, thus, was primed for ITC, but the other was not ready, as they were legitimately seeking a more technical solution (i.e., budget, staffing, resources, etc.).

We have made changes that enable our facilitators to prepare for, and then learn from, each unique ITC engagement, and some of these measures are admittedly not unique but rather common expectations for good facilitations. The pre-session meetings we described in our process steps are designed more purposefully, allowing us to proactively capture information that helps us assess group readiness, group dynamics, and sensitive areas or hot spots. We deepen our conversation with the requesting individuals about ITC as a change model, create realistic expectations, and ensure ITC is a good fit for the group. We also routinely hold post-session

debriefs during which the ITC facilitators, the ITC team leaders, and group representatives reconvene to dissect and give voice to what was learned, what went well, and what could be improved. In a recent survey, ITC facilitators reported that the pre-session meetings lead to more successful ITC mapping and testing sessions and that the post-session debriefs enable greater learning and skill development.

The Challenge of Facilitator Development

“Use it or lose it” is an aphorism that holds true for ITC skills. When we do not have enough ITC work to keep all of our facilitators busy and, thus, learning experientially, skills become rusty. Consistent and high-quality ITC work largely depends upon the ever-deepening expertise of a force of quasi-volunteers. Not only should ITC work not be undertaken at all without thorough initial training by qualified individuals (typically the faculty at Minds at Work), but the ITC facilitators also need to practice. Less skilled facilitation results in poorer quality maps and tests, putting into question the value of ITC as a change model. ITC facilitators are passionate about the work we do and why we do it. We know anecdotally and from formal survey feedback that they are hungry to grow and learn.

While engagement of more veteran facilitators into mentor roles has helped, we have had to do more. We now hold quarterly professional development meetings, leveraging facilitator input to help us deliver relevant topics and training. We recently launched an ITC Facilitator Community site in CANVAS (VCU’s Learning Management System for faculty and students) so that everyone can share relevant resources. We have honed, standardized, and made readily available to facilitators job aids, such as ITC tools and templates that support best practices. We have initiated frequent drop-in group practice sessions and targeted one-on-one practice sessions.

Facilitators have told us how valuable these practice sessions are to growing their expertise and confidence.

The Challenge of Creating Demand and Commitment

“If you build it, they will come,” is a phrase that works better in the movies than it has for ITC engagements. We, like many university initiatives, constantly and energetically scramble for the attention, interest, and engagement of deans, committee and department chairs, and key stakeholders. One of the ways we are able to promote ITC is by leveraging the power of our three-person ITC leadership team. We have been able to dedicate one of us to creating demand for the program. This means networking with academic leaders, cultivating and following up on leads, presenting about ITC at key internal and external events, and engaging with the VCU ADVANCE IT grant leadership on ways to further promote ITC. In addition, we are working to institutionalize the ITC program, along with other grant initiatives, so that efforts will be sustained once grant funding runs out. The goal is for ITC facilitators to continue to work with departments, including those that are new to the ITC process, those that articulate new and/or refined improvement goals, and those that need refresher sessions due to faculty turnover.

A challenge related to creating demand is the challenge related to committing time. As our recent engagement with Department X (see evaluation and impact section) demonstrates, it is important for units to allocate the necessary time and attention to the ITC process and not shortchange it.

The Challenge of Scalability

Institutional Transformation awards are part of the branch of the NSF ADVANCE program that most explicitly aims for systemic change of the institution. One could reasonably ask how the team at VCU envisions to reach this ambitious goal. For one, we deliberately

designed our ADVANCE IT project to include several programs rather than merely focusing on one that would then be expected to be the sole catalyst for transformative change. Therefore, as mentioned above, our grant related initiatives go above and beyond the ITC program. These initiatives work to effect change in faculty recruitment and retention, in policies and procedures that influence promotion and tenure and career-life integration, and in faculty and department chair professional and community development.

Furthermore, we see the ITC program through a similar lens as higher education scholar Adrianna Kezar (2018), who explicitly mentions ADVANCE programs as an example of what she calls “national projects aimed at sense making” (p. 97). According to her analysis, some ADVANCE projects help individuals to bring to the surface unrecognized values and assumptions, and doing so will, in turn, allow them to make new institutional sense and address the role they play in institutional sexism, racism, and other forms of discrimination and intersectional disadvantage. The [“Dialogues program”](#) at West Virginia University (WVU) serves as an example, and we find our ITC program comparable. Dialogues seeks strategic transformation through training faculty, staff, and administrators in how to more effectively communicate and collaborate, ultimately engaging in behaviors that lead to stronger relationships and trust in work groups. These groups are then better able to act with increased confidence so that they can achieve diversity, equity, and inclusion goals.

We are aware of the challenge of these types of programs that seek to transform individual people and the units they constitute, such as search committees and departments. These efforts are vulnerable because of faculty turnover, and the potential of diminishing over time. However, one could also argue, as Brown McNair, Bensimon, and Malcom-Piqueux (2020) have, that:

Change must happen individually before it can happen collectively. People drive change, lead change, and sustain change. Lasting change happens when educators understand both the meaning of equity and that meaning is represented through personal values, beliefs and actions. This is why this journey begins with *you*. We want you first to engage in self-reflection on your current equity definition, values, and beliefs . . . (p. 1)

While our program is not yet as developed as the Dialogues Program at WVU, it similarly seeks to help individuals and teams advance on their journeys toward change. We are doing this by helping potential change agents understand and address hidden worries, commitments, beliefs, and assumptions that get in the way of actualizing their improvement goals and keep them stuck in the status quo, despite best intentions. Doing so is not the silver bullet in the institutional transformation process, but it is designed to work in conjunction with other strategies our grant encompasses.

The Challenge of Theory Development

Much of the current literature on diversity, equity, and inclusion, as well as many organizational change efforts, employ intersectionality as a conceptual lens, acknowledging and analyzing how multiple systems of oppression intersect. Dating back to feminist bell hooks (1982; 2014 [1984]) and legal scholar Kimberlé Crenshaw (1989), the framework “. . . explains how related systems of oppression, domination or discrimination depend upon and reinforce each other to lead to systematic injustice and social inequality” (Rosser, 2018, p. 1). We mentioned previously that when we began our work at VCU, we could not locate institutional data that had taken the concept of intersectionality into account, let alone attend to the challenges inherent in intersectionality research (Bowleg, 2008). One of our ongoing efforts over the last years has been to work with the relevant institutional offices to change that situation.

In our own work focused on ITC, intersectionality is just emerging as an analytical concept. However, we might consider whether, and if so how, intersectionality might become a concept used for analysis of maps. For example, we could encourage individuals and teams to consider intersectionality when they define their improvement goals, which would then filter through the entire map making and testing processes.

That said, there may also be a growth opportunity for the creators and facilitators of ITC to provide guidance on how facilitation could take structural forms of oppression into account. As is, the framework, while supporting both individual and organizational change, does little accounting for power structures and rarely discusses the ways in which these structures privilege some individuals at the expense of others. Structural racism in higher education, settler colonialism, and patriarchal and heteronormative structures, practices, and norms situate individuals at varying positions of privilege or oppression in an organization, and this situatedness or positionality is not explicitly considered in the ITC framework. The architects of the ITC change methodology and those of us who facilitate the process continue to grapple with questions such as “in what ways do oppressive structures, especially intersecting systems of oppression, complexify ITC processes?” “Are there specific prompts or facilitation moves that can help individuals and groups identify unconscious biases that account for multiple dimensions of identity?”

Participants’ own identities will also necessarily impact how they engage in the ITC map making and testing process and will raise questions for our further exploration. Some aspects of our biases and their impact on us may still evade our scrutiny in using ITC because we may not be ready to recognize them in the map making process. As facilitators, how can we better help those with privileged identities recognize those as racialized, gendered, etc., rather than

“neutral,” “objective” lenses, and help these individuals explore how their identities may contribute to the specific worries and assumptions that block our progress in diversifying faculty? How can we more effectively enable both search committee and department members to acknowledge and explore the unequal power relationships among their members and the impact of those power structures on their assessments and decisions about diverse candidates and their work? Regarding testing, how do we help team members realize that what seems like a safe test to some may not be, or at least may not feel, safe to others if, for example, they run the risk of verifying big assumptions involving racism or sexism or the intersection of both? The myriad ways a search committee may unwittingly protect and reproduce inequity (Sensoy & DiAngelo, 2017)—which may also be true for department members and ITC facilitators—should not deter us from beginning this process; however, they do point to the ongoing challenges of this work.

Challenges as Opportunities to Build Sustainability

Our longer-term goal for the ITC methodology is that it is embraced and sanctioned by the university as one of the ways we approach change on small and large scales. We view the challenges presented here and the others yet to come as gifts: they are feedback, messages, and waving flags that we must notice and to which we must respond if our goal of sustainability of ITC at VCU is to be achieved.

Conclusion

Based upon the realization and ample documentation that institutional change is exceedingly difficult, the ADVANCE-VCU team is in the process of applying the Immunity to Change (ITC) framework (Kegan & Lahey, 2009) to change efforts at our university, specifically efforts to increase faculty diversity, in general, and the representation and advancement of women in STEM fields, in particular. According to the ITC theory, both individual and

collective change efforts may at times stall despite best intentions and full commitment to the change goal. Something akin to a biological immune system is to blame for stalled change efforts; namely, hidden commitments and assumptions that compete with and undermine the change goal, all unbeknownst to the parties trying very hard to make change happen. Once this “immune system” has been understood, typically through the previously described mapping process, agents of change are able to test their assumptions, weaken the power of competing commitments, and engage in behaviors—individually or collectively—that support rather than undermine the change goals. Thus, they slowly inch toward overcoming immunities to change and eventually achieve their goal.

For more than three years now, the ADVANCE-VCU team has applied ITC to institutional change work as part of our ADVANCE IT grant. We have trained two cohorts of ITC facilitators who have worked with teams, such as departments and search committees, as well as individuals, to diagnose and dismantle immunities to change. Preliminary evaluation and impact data indicate some success in achieving our goal, and many lessons have been learned along the way. These lessons include the challenges of comfort and discomfort in doing ITC work, of group dynamics, of continuous development of those trying to ignite the change, and of creating buy-in among members of the university community who tend to be skeptical of what can sometimes be perceived as nothing more than another interesting idea or even fad. Finally, there are also the challenges of how to develop the ITC framework to explicitly address systemic barriers to change and include guidance for how to prepare facilitators to consider intersecting forms of oppression.

We will continue with our ITC work. We are seeing promising results and are using setbacks and curve balls as learning opportunities. We are convinced that there is as much to

learn from failure as there is from success, and that much of what is going on at VCU might resonate with other institutions across the nation that are equally committed to change and yet experience that this change does not always occur or that it does not last. These institutions may experience their own immunities to change and find our work helpful in reflections about how to become more successful change agents, taking the foot off the brake and being fully able to move forward.

References

- Ahmed, S. (2012). *On being included: Racism and diversity in institutional life*. Durham, NC: Duke University Press.
- Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action Science*. San Francisco: Jossey-Bass.
- Argyris, C. & Schon, D. (1997). *Organizational learning: A theory of action perspective*. Boston: Addison-Wesley.
- Bennis, W. G., Benne, K. D. & Chin. R. (Eds.) (1985). *Planning of Change* (4th ed.). New York: Holt, Rinehart, and Winston.
- Bochman, D. J. & Kroth, M. (2010). Immunity to transformational learning and change. *The Learning Organization*, 17(4), 328-342. DOI: 10.1108/02621711111126828
- Bowe, C. M., Lahey, L., Armstrong, E., & Kegan, R. (2003). Questioning the “big assumptions.” Part I: addressing personal contradictions that impede professional development. *Medical Education*, 37(8), 715-722.
- Bowleg, L. When Black + Lesbian + Woman ≠ Black Lesbian Woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles* **59**, 312–325 (2008). <https://doi.org/10.1007/s11199-008-9400-z>
- Brown McNair, T., Bensimon, E. and Malcolm-Piqueux, L. (2020). *From equity talk to equity walk: Expanding practitioner knowledge for racial justice in higher education*. Hoboken, NJ: Jossey-Bass.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 140: 139-167.
- Heifetz, R. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.

- Helsing, D., & Howell, A. (2014). Understanding leadership from the inside out: Assessing leadership potential using constructive-developmental theory. *Journal of Management Inquiry*, 23(2), 186-204.
- hooks, bell (1982). *Ain't I a woman: Black women and feminism*. London, Boston: South End Press.
- hooks, bell (2014) [1984]. *Feminist theory: From margin to center* (3rd edition). New York: Routledge.
- Kegan, R. (1982). *The evolving self*. Cambridge, MA: Harvard University Press.
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.
- Kegan, R. & Lahey, L. L. (2009). *Immunity to change: How to overcome it and unlock the potential in yourself and your organization*. Cambridge, MA: Harvard University Press.
- Kegan, R., Lahey, L. L. (2016). *An everyone culture: Becoming a deliberately developmental organization*. Harvard Business Review Press.
- Kezar, A. (2018). *How colleges change: Understanding, leading, and enacting change*. NY, NY: Routledge.
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Ann Arbor: Research Center for Group Dynamics, University of Michigan.
- Mehrotra, A., Pradeliski, B. S. R., & Vishnoi, N. K. (2022). Selection in the Presence of Implicit Bias: The Advantage of Intersectional Constraints.
<https://doi.org/10.48550/arxiv.2202.01661>

- Ogunbe, O., Mitra, A. K., & Roberts, J. K. (2019). A systematic review of implicit bias in health care: A call for intersectionality. *IMC Journal of Medical Science (Online)*, 13(1), 5. <https://doi.org/10.3329/imcjms.v13i1.42050>
- Patel, L. (2021). *No study without struggle: Confronting settler colonialism in higher education*. Boston, MA: Beacon Press.
- Revens, R.W. (1982). *The origins and growth of action learning*. Chartwell-Bratt: Bromley.
- Revens, R.W. (1983). *The ABC of action learning*. Chartwell-Bratt: Bromley.
- Rosser, S. (2018). Intersectionality and ADVANCE. *The ADVANCE Journal* 1(1). https://www.advancejournal.org/article/3750-intersectionality-and-advance?article_token=ucQcu-otYP7YJQdQQ0MJ
- Schein, E.H. (1990). Organizational culture. *American Psychologist*, 45(2), 109-119.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Sensoy, O., & DiAngelo, R. (2017). “We Are All for Diversity, but . . .”: How faculty hiring committees reproduce whiteness and practical suggestions for how they can change. *Harvard Educational Review*, 87(4), 557–580. <https://doi.org/10.17763/1943-5045-87.4.557>
- Torbert, (2000). *Personal and organizational transformations through action inquiry*. Boston, MA: Edge/Work Press.
- Torbert and Associates (2004). *Action inquiry: The secret of timely and transforming leadership*. San Francisco, CA: Berrett-Koehler Publishers.

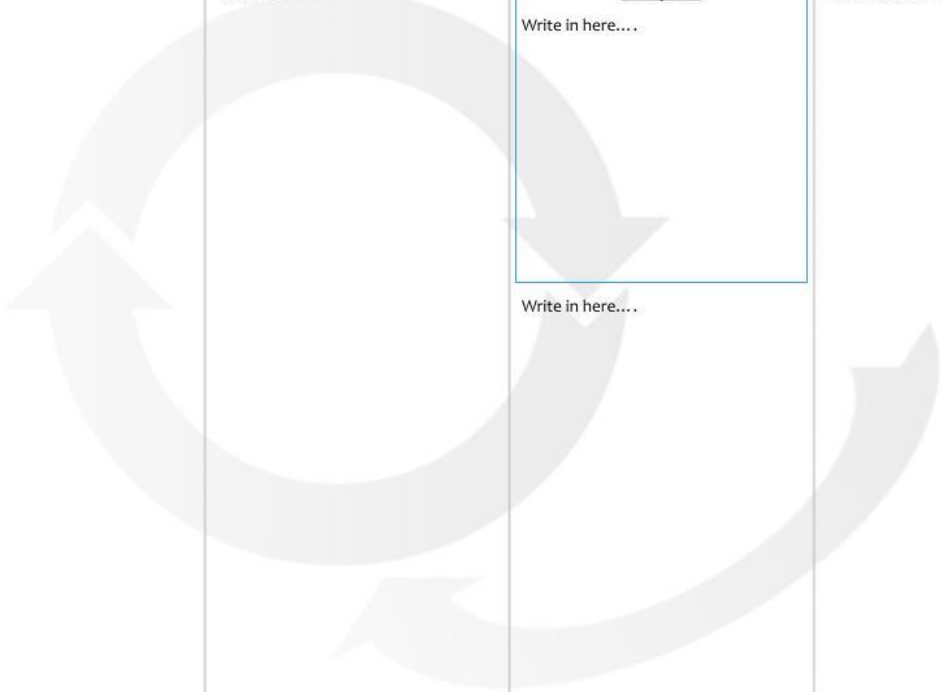
Torres, L. E. (2013). Lost in the numbers: Gender equity discourse and women of color in science, technology, engineering and mathematics (STEM). *The International Journal of Science in Society*. Vol. 3(4), 33-46.

Appendix A

ITC Mapping Template

Immunity Map

1. COMMITMENT (IMPROVEMENT GOAL)	2. DOING/NOT DOING (vs #1)	3. HIDDEN COMMITMENTS	4. BIG ASSUMPTIONS
I	Write in here....	<u>Worry Box</u> Write in here.... Write in here....	Write in here....



© Minds at Work

minds at work

Appendix B

ITC Testing Template**DESIGN A TEST OF YOUR BIG ASSUMPTION**

THE BIG ASSUMPTION I AM TESTING	WHAT I WILL DO	DATA I WILL COLLECT	IN ORDER TO LEARN THIS ABOUT MY BIG ASSUMPTION

© Minds at Work

minds at work

This material is based upon work supported by the National Science Foundation under Grant No. 1824015. Any opinions, findings and conclusions, or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation. This work was made possible by the National Science Foundation (NSF).

Dr. Philipsen is a professor in the Department of Foundations at Virginia Commonwealth University. She is also Co-PI of an NSF ADVANCE Institutional Transformation grant geared at increasing faculty diversity at VCU, and a certified coach in the Immunity to Change methodology. Her research interests span the social foundations of education, including issues of social justice and equality in education, specifically the roles of race, gender, and social class in shaping schools and institutions of higher learning.

Penny McFarline, MEd, is an organizational development specialist in VCU's HR department. She earned her MEd in Adult Learning from VCU in 2011 and is currently working on her doctorate. Penny is certified as a Skilled Facilitator®, is a trained ITC facilitator, and serves as Co-Chair of the ADVANCE-VCU ITC Facilitation committee. Her professional interests include group and team dynamics, situated learning and communities of practice, and organizational change models.

Ana Mills, PsyD, is a licensed clinical psychologist and associate professor in the Department of Physical Medicine and Rehabilitation at Virginia Commonwealth University in Richmond, Virginia. She is the Co-Chair of the ADVANCE-IT Immunity to Change Program and Chair of the PM&R Workgroup for Excellence in Diversity & Inclusive Practice. Her clinical work as a rehabilitation neuropsychologist informs her work in diversity and inclusive practice, with a focus on acquired disability and intersectionality. Dr. Mills' research and scholarship activities include resilience after brain injury, cognitive health in aging, and health equity in rehabilitation care.

Jennifer J. Reid, PhD, serves as the Evaluation Director in the Center for Public Policy, Wilder School of Government and Public Affairs. She is an applied developmental psychologist with a rich background in qualitative and quantitative methods in research and evaluation. For 30 years she has worked in the field of research and evaluation on grant funded projects. Her strength is in developing high-quality and equitable research/evaluation plans. Her work has consisted of working with diverse populations across Virginia. She holds an International Federation of Coaching certification. Using a holistic approach, she coaches women and young adults in making authentic life transitions.

*Deb Helsing is the Director of Minds at Work, where she coaches, consults, and provides training on the Immunity to Change approach. She also holds a faculty position at Harvard University's Graduate School of Education, teaching courses in Adult Development and Immunity to Change. She has co-authored several articles and books, including: *An Everyone Culture: Becoming a Deliberately Developmental Organization* (2016, with Robert Kegan, Lisa Lahey, Andy Fleming, and Matt Miller).*

Denise Grothues, MA, was the project coordinator of ADVANCE-VCU, a National Science Foundation (NSF) ADVANCE Institutional Transformation (ADVANCE IT) grant that focuses on the recruitment, retention, and advancement of diverse faculty women in STEM. She has been a business, science, and technical writing instructor in higher education and has worked as a technical writer and editor for a state agency that trains emergency response personnel. She is currently a scientific writer at the Virginia Commonwealth University Massey Cancer Center.

Susan G. Kornstein, MD, is Professor of Psychiatry at Virginia Commonwealth University, where she is Executive Director of the Institute for Women's Health. She is Principal Investigator on the ADVANCE-VCU institutional transformation grant funded by the National Science Foundation.