

# Faculty change agents for systemic transformation: Leaders for Inclusive Learning

Kim A. Case, Allison A. Johnson, and Sarah E. Golding

#### Abstract

Leaders for Inclusive Learning (LIL) is a theoretically grounded initiative focused on faculty and designed to increase inclusive teaching and decrease academic success equity gaps across 15 departments responsible for a largest proportion of general education courses. Designed as a combination of the Change, the Adopters, the Change Agents, and the Organization (CACAO) change model and the Progress towards Inclusive Excellence through Reflection (PIER) critical reflection process, the LIL program created a faculty cohort of inclusive teaching experts to lead significant equity-focused change in the culture of teaching and learning within their respective departments and, therefore, across the college. This innovative leadership program has already begun to garner impressive results within departments and across the college. Authors provide a list of recommendations for implementation to advance second- and third-order institutional change.

**Keywords:** culture change, inclusive teaching, departmental change, faculty leadership

## The Challenge

Despite receiving consistent accolades for supporting students from underrepresented (UR) groups—for example, 6 years of recognition as a Diversity Champion by INSIGHT Into Diversity (McNeill, 2024)—our institution continues to produce student academic success disparities. 1 These disparities exist along racial, ethnic, socioeconomic, and college generation status, and many students at our institution identify with multiple marginalized identities. These disparities, like at other institutions, were exacerbated by the pandemic and clashed with the institutional commitment to equity outlined in strategic planning goals. This created a desperate need for innovative interventions to address these disparities across disciplines and departments.

When equity-gap efforts focus on faculty, which is guite typical, the change level remains at the individual course level and individual faculty level (e.g., Dewsbury, 2017; Kinzie et al., 2008). Pedagogical development opportunities typically focused on individual classes such that positive changes exist only as long as that faculty member teaches that class (Henderson et al., 2011; Viskupic et al., 2022) and remains at the university. While we strongly support individual faculty development to better serve UR students in their academic success, the literature suggests that significant change in higher education requires a much broader and deeper organizational approach. There have been few efforts to create more widespread departmental- or college-level change (Reinholz & Apkarian, 2018; Reinholz et al., 2017); however, for true transformational change to occur, a larger community of practice must be formed, and revisions must be made to the curriculum, academic policies, and even promotion guidelines (AAC&U, 2014; Corbo et al., 2016; Henderson et al., 2011; Kezar, 2018). Silos must be broken

<sup>1</sup> Underrepresented refers to social groups with a lower percentage representation in the undergraduate student body than in the general population, such as first generation, low income, students of color, women in science, LGBTQ+, and students with disabilities.

to create a greater collective responsibility for increasing equity both within departments and the wider college community (Henderson et al., 2011).

## Leaders for Inclusive Learning

In this article, we describe how we addressed equity gaps in student academic success through the development of the Leaders for Inclusive Learning (LIL) program. The LIL was specifically designed to build a cohesive community of faculty change agents across 15 departments. The departments make up the largest college, the College of Humanities and Sciences, within a research-intensive public university with a high percentage of students of color and first-generation students (university consists of 19 colleges and schools). Our unique LIL model targeted UR student success through a cohort of faculty leaders specifically emphasizing inclusive practices, structural barriers, unit-level culture shift, and change leadership. The LIL program, described in detail below, incorporated three integrated phases: (1) growing in knowledge and skills for equitable and inclusive teaching, (2) analyzing systems and developing change agent strategies, and (3) embracing identity as faculty leaders to create change in their home departments. For example, faculty gained skills to recognize and analyze the impact of systemic racism and the systemic hidden curriculum for first-generation students on academic success. The LIL faculty change agents expanded their inclusive teaching knowledge and became leaders within their home departments to reduce equity gaps for UR student success. By empowering faculty to step into leadership roles as change agents within their respective departments and across the college, we aimed to expand the footprint of existing UR student success efforts by creating a network of connected and collaborative faculty leaders to catalyze and sustain transformational change. Below we describe the design and implementation of LIL, its impact on institutional transformation, and recommendations for others interested in launching similar transformation initiatives.

#### Theoretical Framework for LIL

Grounding organizational change in theoretical models and evidencebased practice strengthens the framework and better informs strategic decision points. Designed through integration of two theoretical change models, the LIL program harnessed faculty expertise and institutional priorities to move beyond first-order change at the individual level to more transformative second-order change at the structural level. We relied heavily on the Change, the Adopters, the Change Agents, and the Organization (CACAO; Dormant, 2011) theory of change and integrated theoretical underpinnings from the Progress towards Inclusive Excellence through Reflection (PIER) tool created by the American Association of Colleges and Universities (AAC&U, 2021).

The CACAO change theory (Dormant, 2011) highlights four essential elements for change: clarity about the change goal(s), the adopters who embody the change behaviors, the change agents who form a change team to lead and support adopters, and strategic consideration of the structures and contexts of the organization (Earl et al., 2020). The theory emphasizes centering the adopter perspectives and needs at each stage of change implementation (Dormant, 2011). In our organizational context, the broader faculty are the adopters of change who have the power and influence to transform inclusive teaching and inclusive practices (see Figure 1). Faculty change agents make up the implementation team that facilitates and coordinates activities (Lunenburg, 2010; Viskupic et al., 2022). By selecting faculty from each department, our team of change agents brought their grassroots energy and applied their inherent understanding of unit context and their access and relationships with colleagues to more effectively stimulate change (Andrews et al., 2016; Viskupic et al., 2022). Given our unique institutional characteristics (research intensive, minority serving, high first generation, low income, large enrollment), faculty development opportunities lacking attention to our specific context often miss the mark. The CACAO model specifically focuses on supporting internal experts, who hold institutional history and knowledge

# ${\bf CACAO\ model = Institutional\ Priorities/Context + Grassroots\ Energy/Expertise}$



Fiscally Responsible | Sustainable | Leveraging Strengths

Figure 1. The Change, the Adopters, the Change Agents, and the Organization (CACAO) Model

of context, and ensuring that institutional structures and culture are accounted for during change interventions.

Adding change potential to our use of the CACAO change theory, we infused strategic critical reflection (PIER; AAC&U, 2021) as foundational to the LIL program framework. The PIER summary (AAC&U, 2021) by the AAC&U Inclusive Excellence Commission provides guidance on institutional change. Though research on first- and secondorder change abound in organizational and educational literature (for reviews, see Buchanan et al., 2005; Schaffer et al., 2012), we adopted PIER tool language in support of our CACAO theoretical framework (see Figure 2). First-order change may take the form of adjustments at the individual level, remains at the surface level, and may not reach the goal of institutional change because underlying assumptions and practices are unaffected (AAC&U, 2021). For example, quite commonly, faculty development efforts gather interested faculty to make changes to their individual courses or learn more about best practices in hiring new faculty. However, reaching the needed critical mass to tip into institutional transformation will likely never occur with this one individual at a time approach. Second-order change means foundational moves that shift previous hidden or explicit assumptions, cultural norms and values, and operational behaviors (AAC&U, 2021). Achieving secondorder change shifts the organization from individual attributions and default deficit models to systems-level critique and changes to structural elements including policies and procedures. Due to the size of



Figure 2. Progress Toward Institutional Transformation

our institution, we use second-order change to describe structural changes at the department and college system levels. Needing additional terminology to conceptualize institutional transformation, we added the phrase third-order change to name the much more complex university system beyond the college and department systems.

CACAO describes the effectiveness of harnessing grassroots energy from early adopters coupled with prioritization by powerful administrators to create a team of change agents (Dormant, 2011; Viskupic et al., 2022). The interaction of grassroots adopter energy, administrative prioritization, and strategically powerful critical reflection offered by PIER (AAC&U, 2021) maximizes the potential for second-order and potentially third-order transformational change.

# Theoretical Alignment Within LIL

In applying this integrated theoretical framework (CACAO + PIER), the LIL program directors first recruited the faculty early adopters of inclusive practices to be members of the LIL program. As adopters selected to become leaders, the faculty participants benefited from transparent support from the dean's office for widespread change, representing administrative prioritization essential for institutional or third-order change. Although we, the three authors, served as the initial change agents with knowledge, skills, expertise, and institutional support to facilitate broader change, the program goal was to transform the departmentlevel early adopters into change agents (Elrod & Kezar, 2017). Our goal was to develop these faculty change agents to spread the efforts for structural change, thus creating a critical mass to sustain the efforts long term (Reinholz & Apkarian, 2018). As the LIL program directors, we intentionally frame each stage of the LIL program and process to maximize individual learning, build community and group cohesion, and facilitate leadership and change agent identity among adopters. In alignment with the CACAO approach, our change model focused on systems change rather than individual change alone, as well as evidence-based inclusive practices that could be implemented to reduce equity gaps in academic performance. As such, we emphasized the value of change in terms of classroom teaching behavior across the curriculum as well as structural policies and practices while intentionally turning focus away from factors outside of faculty control (e.g., academic preparation in high school).

#### Institutional Context

Virginia Commonwealth University (VCU) is a minority-serving institution (Asian American and Pacific Islander designation) and integrated into the urban center of Richmond, Virginia. The university is a doctoral research-intensive institution that enrolls over 31,000 undergraduate (UG), post-baccalaureate, graduate, and professional students. The university attracts first-generation college students (30%), students from low-income families (30% receive Pell Grants), veterans, and transfer students from community colleges (25%). The Fall 2022 UG enrollment of 22,000 students included 32% members of UR racial groups, primarily Black/African Americans (20%) and Latino/Hispanic Americans (11%). The LIL program was housed within the College of Humanities and Sciences (CHS), which serves 11,000 UGs. The college houses the humanities, social sciences, and natural science departments, thus providing the liberal arts education for the university. The college is staffed by about 450 faculty members and teaches approximately 300,000 credit hours per year. Therefore, group disparities in course outcomes in CHS foundational courses have an immense impact on UR student success at our institution.

## **Program Scope**

The program aimed to bring together faculty already exhibiting inclusive leadership characteristics that could be harnessed and further developed for broader change to reduce equity gaps and increase the success of UR students. As the main strategic goal, LIL aimed for change at the college system level, or second-order change, across 15 of the 17 departments, to maximize faculty change agent impact (Corbo et al., 2016; Earl et al., 2020; Klein et al., 2020; Reinholz et al., 2021; Viskupic et al., 2022; Wise et al., 2022). Twenty-five faculty early adopters across these 15 departments were identified as influential colleagues and potential leaders through an official nomination system (chair nominations and self-nominations). Faculty participants were experts in their fields, and the majority were from underrepresented groups in academia (e.g., Latinx, African American, first generation, queer identified, women in science). In large units, particularly those that teach high enrollment service courses, additional faculty members were selected to bolster the impact of the LIL program on UR student outcomes: Biology (4), Health Sciences (2), Math (4), Physics (2), Psychology (2), and World Studies (2). Support and funding for the program was a partnership between the provost, dean, and an HHMI IE2 grant. The total cost for the 12-month LIL program was under \$140,000 including faculty stipends (see Appendix). With support across various institutional levels—faculty, chairs, dean, provost—the program began with a solid foundation for moving beyond first-order to second-order and potentially third-order change (Elrod & Kezar, 2017).

# LIL Program Design and Assumptions

The LIL program's main purpose was to reduce equity gaps in student success by creating a cohesive group of equity-minded faculty change agents across the college. Educated in systemic barriers to UR student success, the faculty change agents were empowered to stimulate

transformational change to make progress in retaining a higher rate of UR students, thus advancing our institution's academic mission. We designed the program with explicit foundation and assumptions that we shared early and often with the selected LIL faculty:

- Faculty college-wide cohort: By bringing together committed inclusive teaching early adopters from across departments, the LIL faculty learn from and lean on peers for support.
- Faculty leading department change: We amplify faculty as leaders of the curriculum but also as leaders of widespread culture change. Institutional transformation is most effective when driven by the faculty, for the faculty, and with the faculty.
- Systems-focused: LIL operates under the explicitly named assumption that there are systemic structural barriers that result in disparities in student success. For example, LIL confronts and deconstructs systemic and institutional racism as well as intersecting systemic barriers impacting first-generation, transfer, and low-income students; women in science; and students with disabilities.
- Equity-minded: The program infuses a core equity-minded approach and explains the harms of operating from a deficit mindset (Nadelson et al., 2022). From the initial call for applications and the first group meeting, the program establishes a culture of focusing on how faculty and departments can support UR student success. The program directors consistently share the benefits of moving away from deficit-minded approaches to teaching and UR student success, moving toward strength-based frameworks. Operating from a strength-based perspective, faculty recognize assets UR students bring to class based on their lived experiences and invite those perspectives to be shared via inclusive practices.
- Internal experts: The program intentionally utilizes internal talent from across institutional programs to facilitate sessions. This serves to expand the university-wide network for our cohort of

LIL faculty as well as build longer-term partnerships with various units and offices across campus.

- Faculty experts: The LIL program assumes faculty are the ultimate content experts within their own disciplines and that they understand the contexts within their departments. Program directors explicitly state that our roles were not to serve as experts for each discipline or department context. Rather, we act as coordinators of the LIL faculty community focused on shared continuous growth.
- Positionality: As white women program directors, we consistently acknowledge that we could not speak from lived experiences with systemic racism. Instead, we purposefully model ally behavior by naming structural racism within education systems and providing examples of our own critical self-reflection and change behaviors.

These shared understandings helped define roles for program directors and each faculty member joining the program.

# **Three Key Program Phases**

To develop individual inclusive teaching early adopter faculty into change agents as well as promote a community of practice, LIL faculty engaged in enhancing inclusive teaching skills, developing change agent strategies, and embracing change agent identity and leadership. The three phases were delivered in distinct timeframes over summer, fall, and spring semesters. Figure 3 provides a visual representation of the three phases of LIL and major goals for each.

# Phase 1: Build a Foundation for Inclusive Teaching

The overarching goal for Phase 1 was to build a solid foundation of inclusive teaching across the LIL cohort by bringing everyone to a base level of shared awareness, terminology, knowledge, and practice of inclusive practices. In 2018, VCU was awarded an HHMI Inclusive

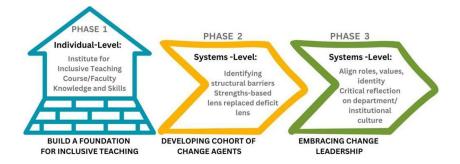


Figure 3 Leaders for Inclusive Learning Program Phases

Excellence award and developed our Institute for Inclusive Teaching (IIT), which aligns with the *Norton Guide to Equity-Minded Teaching* (Artze-Vega et al., 2023). As aligned with organizational change practices (Elrod & Kezar, 2017), we gathered 2 years of information and feedback from students to inform the IIT design focused not on fixing UR students, but on improving institutional structures.

LIL faculty participated in the 5-day summer IIT program as part of Phase 1. The Phase 1 inclusive teaching curriculum focused on individual faculty development, gaining knowledge and skills, and taking action to incorporate inclusive practices into one course. Facilitators covered a host of topics and applied practices related to cultural awareness, universal design, inclusive syllabi, and more. Throughout Phase 1, program directors intentionally incorporated faculty peer discussions, reflective exercises, and growth mindset norms to aid in the development of a community of supportive peers (see Appendix for logistics and program details).

The faculty selected for the LIL arrived ready for the IIT with a strong sense of commitment to advancing equity in student success outcomes. An example of their core focus, the group expressed a sense of urgency and internal motivation to solve the problem of racial disparities in academic success, even more palpable in the context of the murder of George Floyd one year earlier. The LIL cohort seemed to take comfort in coming together as a connected group and saw one another as allies in a broader movement. Some felt strong

support from their home units, but others lacked support from their department colleagues. Therefore, finding this community to lean on as advocates for change reduced feelings of isolation for many.

Although this phase emphasized the individual course level, program directors infused messaging to prepare faculty participants for systems-level focus in the next two phases of the LIL program. The IIT followed a model focused on individual faculty and incorporating inclusive practices within their individual classes. While data from prior cohorts (before LIL) suggest the IIT was effective at improving UR students' feelings of inclusion in the classroom, improving course outcomes, and increasing faculty teaching satisfaction, the IIT's capacity to create departmental and institutional change was limited (Dormant, 2011; Earl et al., 2020; Viskupic et al., 2022). Phase 2 began the intentional development of LIL faculty into change agents at the department level to shift toward second-order change.

#### Phase 2: Develop a Cohort of Change Agents

In Phase 2, which took place in the fall semester following Phase 1, the overarching goal was to move faculty from inclusive teaching adopter status toward leadership as systemic change agents. Program directors provided LIL faculty with the option of virtual participation to support equitable access. Unlike Phase 1's individual focus, in Phase 2, faculty participants learned how to think systemically at the department and college levels.

Phase 2 curriculum focused on analyzing systemic barriers, challenging assumptions about why success gaps existed, moving beyond deficit mindset, applying a strengths-based lens to UR student success, and centering analysis of what we can change structurally to better support them. We drew on experts internal to the university and the well-known scholars as workshop facilitators and speakers. Our collaborations with campus experts allowed us to elevate faculty awareness beyond their individual classrooms to systems and structures within our academic units that continue to perpetuate systemic disparities. For example, we hosted internal speakers from the Antiracist Educator training developed by the school of education, the transfer student advising center, and the university-wide leadership institute. Workshops and discussions emphasized critical analysis of systemic exclusion embedded in the curriculum, departmental policies, committee structures, and institutional norms. Faculty assignments included speaking directly with UR students, professional academic advisors, and faculty colleagues to understand barriers unique to UR students in their home departments. We also focused heavily on internal resistance to change as well as types of resistance to change faculty might encounter among colleagues (see Appendix for details).

As a guiding source for Phase 2, we provided each faculty participant with a copy of the book *Change Leadership in Higher Education* (Buller, 2014). The change leadership book established common ground across the LILs for learning more about reframing change, cultures of innovation, and leading in the wake of various types of change. The book content overlapped with topics covered by guest speakers and workshop facilitators during group meetings. For example, the book chapter about leading reactive change paired well with a workshop on various ways faculty may respond to change and how to respond to resistance.

The program directors implemented specific strategies and handson activities to mark our Phase 2 shift to systems focus. For example,
we held an opening workshop to directly analyze the college's highest
DFW courses (i.e., Fall 2019 grades of D, F, or Withdrawal) through
a structural lens. Within that opening session workshop, LIL program
directors presented actual data on courses with high DFW rates and
racial disparities in DFW rates. Internal campus data too often stay
hidden when they should be used to inform effective strategies for
improvement (AAC&U, 2014; Elrod & Kezar, 2017). Before showing the
slide with DFW data, LIL faculty were prompted to remember university
commitments to serving UR students. One slide highlighted our promise to "transform the lives of our distinctive and diverse students." The
final slide before the DFW data reminded faculty that this was not about
faculty failure, UR student deficits, or lowering our standards. After

sufficiently preparing the faculty, we presented data in the aggregate for courses across departments with specific course names and numbers blacked out. This data, never before shared directly with faculty, allowed the group to face the reality of racial inequities happening in their departmental courses. Initial reactions to the data were collected anonymously and revealed some expected deficit-minded explanations that the group then deconstructed. Moving beyond defensiveness and attributions to student deficiencies, the LILs engaged in small group breakout conversations designed to ask critical questions about structural barriers to UR student success. The group's virtual whiteboard visualized their initial reactions to the data including feeling shocked, culpable, confused, sad, frustrated, curious, responsible, and more.

As uncomfortable as faculty may have felt facing this data, this session represented a powerful turning point from naming all the reasons why UR students cannot meet our standards to paying attention to the systems and structures that faculty can control (change) and what departments could change to better support our very capable UR students. By modeling how to critically question your own assumptions, Sarah (author) gave the LIL faculty an illustration for how to lean into vulnerability and question their deeply automatic assumptions. During the full cohort discussion following the DFW data, Sarah led the LIL faculty through a powerful set of questions designed to question the assumption that "students don't succeed because they are not prepared." Although this assumption served as a practice example, many faculty default to this belief, which subsequently leaves no room for pedagogical improvement or structural analysis. Assumption-challenging questions were designed such that LIL faculty could apply them to a wide range of assumptions about UR student success, teaching, the broader curriculum, and department policies. Sample questions included:

- Who benefits from my assumption?
- Are there any fallacies in my assumption?
- Is there another explanation external to the UR students?
- What happens if I assume the opposite?

Taken together, the strategies employed across Phase 2 made visible the inequitable impact of our systemic challenges experienced by UR students while providing a guide and resource on the power of change leadership. In preparation for Phase 3, we asked faculty participants to begin thinking about how they would work with the department chair; diversity, equity, inclusion (DEI) committees; and other colleagues to promote systems analysis and making structural changes. In addition, we prompted them to reflect on the difference between making change within their own courses versus stepping into the role of peer faculty developer and leader for change.

#### Phase 3: Embrace Change Agent Leadership

In Phase 3, which took place in the spring semester following Phase 2, the overarching goals were to strengthen LIL leadership and faculty developer identities and move them into planning and taking concrete action within their departments. In essence, we aimed to solidify LIL faculty in thinking of themselves as change agents. Rather than spend all hours in workshops, Phase 3 built in more time for critical reflection on department culture and direct action within departments.

The Phase 3 curriculum addressed LIL uncertainty and lack of confidence in leadership skills along with a major focus on department-level planning through reflection on department culture and practices. LIL faculty worked on identifying their spheres of influence and recognizing transferable values, roles, and skills. LIL faculty benefited from a talk by an external speaker with expertise on cultural mismatch theory and Latinx and first-gen student success. (See Appendix for more details on Phase 3.)

To help LIL faculty move from thinking like colleagues to thinking more like faculty development leaders, the opening session of Phase 3 utilized an interactive workshop to guide them through reflections on values, roles, and identities. Kim (author), one of the program directors, designed the workshop to help LIL faculty tap into their deepest core values, recognize various roles they play in their lives that could

inform how they operate as faculty developers, and note any identities they hold that contribute to their leadership. We felt that the complexities involved in faculty developer identity formation (Bowman, 1993; Evans & Chauvin, 1993; Handal, 2007) deserved special attention and deep reflection to support LIL faculty in embracing their shifting roles. In their work on contexts for agency, Landy et al. (2022) emphasized the need for change agents to engage in reflection on personal and professional identities within a specific institutional context. We found LIL faculty struggled to think of themselves as qualified to lead structural change in their units or facilitate the growth of their faculty colleagues. One LIL faculty member voiced concern during a reflective activity by asking, "How can I be a peer mentor to people who don't see me as their peer?" This question spoke directly to the power imbalance felt by faculty not on the tenure track and how tenure-track faculty might not view them as legitimate colleagues. Some expressed uncertainty that official leaders would recognize and support their efforts or that colleagues would not view them as legitimate leaders. This workshop tackled lack of self-efficacy, building confidence, recognizing strengths, amplifying transferable skills, and embracing leadership.

By offering the monthly reflection sessions, we aimed to provide space for LIL faculty to begin intentionally connecting their new skills for systemic analysis to their home departments' culture, policies, procedures, and practices. Cultures across departments varied widely and therefore required careful consideration for identifying potential areas open to influence and change. We adapted the AAC&U Inclusive Excellence Commission's PIER reflective exercise model (AAC&U, 2021), which was designed to advance second-order change for inclusive excellence, to more specifically align with LIL goals of analyzing department-level context. For example, LIL faculty spent time reflecting on and discussing the following prompts:

• In what ways does your departmental context negatively and/ or positively influence your department's ability to promote inclusion in your programs? Where can you identify opportunities to connect LIL goals to departmental context?

- What data does your department have, need, and monitor to observe for signs of inequities in your programs?
- What training, education, or professional development would your department benefit from to start its journey toward inclusion?
- Who are your actors/allies in this journey?
- How will your department incentivize and reward faculty and staff contributions to inclusion in your programs?

These guided reflections helped LIL faculty map out their contexts for agency and gain clarity on change priorities (Landy et al., 2022). As we closed out Phase 3, we consistently encouraged and reminded LIL faculty to take action, gather their change agent allies, and submit plans for the department-level professional development and analysis of the curriculum, policies, and procedures as these were requirements of the LIL program. The program ended with a discussion involving LIL faculty and associate deans who pledged support to continuing work, asked where LILs needed support to move forward, and offered an open door to LILs for future work discussions. Bringing the LIL faculty together with supportive college-level associate deans helped move this work beyond the individual faculty level and beyond any one specific department. Moving forward without the regular schedule and structure of the LIL program, we stressed the need to lean on one another within the LIL cohort for support and as motivation for direct action.

# Change Initiated by LIL Faculty

During Phase 3 and following the conclusion of the LIL program, LIL faculty took action within their departments, at the college level, at the university level, and in their professions. Much of their work at this stage rose to the level of third-order change related to policies, practices, and procedures at the institution. As one LIL change agent posted in

the group's virtual whiteboard space, their goal was to "be collective change agents in our departments/schools." Below we describe first, second-, and third-order changes we observed from LIL faculty.

## Expanding First-Order Change: Leading Inclusive Teaching Change

Near the closing of Phase 3, six LIL faculty shared their own inclusive teaching strategies as speakers at a university-wide event for faculty. One LIL presenter revealed the new inclusive practices he infused in his own courses had already resulted in a 10% reduction in DFWs in his required large enrollment course. In addition, several courses taught by LIL faculty and the adopters they supported have since seen 20%-30% lower DFW rates across multiple sections of "gatekeeper" courses. LILs across several departments organized and hosted workshops for their department colleagues on accessibility and accommodations, supporting transfer students, inclusive syllabi, and other topics. One department provided inclusive teaching events for graduate teaching assistants and adjunct faculty. In another, the LILs formed an inclusive teaching workgroup for the department. The LIL team of another department hosted a university-wide faculty workshop and created a training video on inclusive teaching. All of these efforts to expand knowledge and skills facilitate culture change at the unit level and across the institution. The rise in conversations and making these efforts a natural component of department operations supports culture shift.

# Second-Order and Third-Order Change

LIL faculty led structural changes and harnessed the power of their group to do things differently. For example, LIL faculty lead the charge to update wording in the annual evaluation process to include DEI in teaching efforts, DEI professional development, and pedagogical changes to promote DEI. Several LIL faculty served on a committee to improve how teaching evaluations assess equity-minded teaching practices. One department's formal program review (conducted every

8 years via the office of the provost) benefited from the LIL faculty contributing inclusive language. STEM members of the LIL cohort began breaking down traditional silos and engaging in interdisciplinary problem-solving to better support UR student success across biology, chemistry, and math. LILs were also called to serve on many college and university-level committees related to teaching and student success.

Many LILs pursued internal funding to support teaching innovations and research projects related to advancing equity. They were awarded seven impact grants for inclusive teaching projects, two seed grants for research, and four professional development awards. One LIL from math was selected to be an IDEAS Scholar as part of a national grant, where she designed inclusive teaching materials for use by colleagues in her discipline. Several LIL faculty have now assumed official leadership roles: director of undergraduate studies, assistant director of a research center, associate dean, chair of the college-wide DEI committee, faculty fellow for first-gen student initiatives, and fulltime faculty development. Several LIL faculty also serve as members of the college-wide faculty council as well as the university-wide faculty senate governance bodies. Within these spaces and in formalized leadership positions, LIL faculty will continue to use their system-level thinking to ask critical questions about structural barriers to UR student success. Finally, two of the program directors led development of the university-wide quality enhancement plan as a core feature of the institution's re-accreditation. Transferring our integration of the CACAO theory (Dormant, 2011) and the PIER summary of organizational change (AAC&U, 2021), they will develop a cohort of faculty change agents to lead second- and third-order change across the general education curriculum.

In total, the outcomes of this program have impacted thousands of students and over 100 faculty and staff colleagues and resulted in equity-minded changes in our policies and procedures as well as new research directions. Moving forward from practice to research, we plan to continue collecting information about LIL faculty publications, presentations, leadership roles, and especially faculty development

programming that will benefit the broader faculty at the department, college, university, and national discipline levels.

#### **Limitations and Future Directions**

Perhaps the most challenging limitation of the program is that running a successful LIL requires chairs and the dean(s) to truly support the goals in terms of devoting resources, staff and faculty time, and initiative energy to making this work. Not all contexts are as fortunate to have all of those prerequisites in alignment. A second major limitation for some institutions considering a replication of the LIL program rests with securing funds to support the initial inclusive teaching institute and faculty stipends for participation. Running a program at the scale of LIL requires administrative support at the chair and dean levels and, ideally, also at the provost level. For institutions without this level of support in the form of funding, compensation in the form of time (e.g., course release) while LIL faculty complete the program may be an alternate strategy. We recognize the tension between keeping dedicated educators in the classroom versus reducing course loads and yet stand by the exponential value of the LIL program as a worthy time investment. In fact, our LIL program ran only one time without funding to support a second cohort. Unfortunately, many states passed legislation that may prohibit similar programs.

One area where LIL could improve would be an imagined Phase 4 where LIL faculty are strategically integrated into their department leadership teams. By providing more guidance on structural integration, LIL faculty could be more formally woven into the departmental and college organizational charts and procedures. In this possible Phase 4, department chairs, associate deans, college committees, and department committees working on equity or UR student success would collaborate with LIL faculty and invite them into their efforts as experts. Although this practice article focuses on the theoretical design and implementation of our program, we value evidence and are moving forward with data collection and analysis to more thoroughly evaluate LIL (e.g., UR student feedback, DFW rate changes, survey of LIL faculty, LIL faculty change actions).

# **Implications**

#### Contributions to the Literature

The LIL program has introduced a novel approach to systems change through integrating two change theories, the CACAO change theory and the PIER tool conceptualizations of first- and second-order change, alongside powerful critical reflection. As Lewin (1944) famously shared, "There is nothing as practical as a good theory" (p. 27). As developers of broad and transformational change, the impact of evidence-based practice and starting with a solid change theory cannot be overstated. By virtue of HHMI and AAC&U resources and institutes, we benefited from some previous contact with change theory. However, we learned much more about the power of a strong theory along the way as our program progressed. As we aligned our LIL program phases with both CACAO and the AAC&U PIER tool, we strengthened the foundation for faculty change agents to grow into their leadership roles.

The LIL program has also taken a novel approach to faculty professional development by intentionally intertwining goals of inclusive teaching and practices with leadership development. We purposefully advanced change agent leadership development and leadership identity at each phase. As most inclusive teaching programs focus on individual faculty making changes to their own courses, our approach to the LIL process explicitly stated expectations at the application stage for faculty leadership among their colleagues to transform their departments and therefore the college. Within the program, LIL faculty engaged with workshops and exercises based on the philosophy that leadership is a way of being, not just for those in official positions with certain titles. Our LIL philosophy supports the idea of leading

from outside formal institutional hierarchical positions of power, as well as inside when possible, opening up possibilities for the cohort of change agents to be successful.

#### Recommendations for Educational Developers

For faculty developers interested in facilitating a large-scale cohort of change agent faculty, we provide recommendations to support the planning process. The following suggestions are grounded in both the literature on faculty professional development, organizational change, and our experience developing and implementing the LIL program.

## Vision and design:

- Elrod and Kezar (2017) warned that the vision stage of the change process most often gets glossed over with assumptions that a clear, shared vision already exists. Often the urge to take action that feels like visible progress causes the initial team to skip over the essential vision process. Many change efforts fail at the vision stage before they ever get started. We recommend all change agent developers establish a plan for continuously revisiting the vision and assumptions throughout the program to keep everyone mindful of the "why."
- Take the time to choose a strong change theory, or a combination, you can draw from and then align each aspect of your planned program back to that theory (Reinholz et al., 2021).
- Align your program's main goals with the current university-level strategic plan and any college- or school-level strategic plans (Elrod & Kezar, 2017).
- Make the goals alignment explicit and clear when seeking funding from upper administration.
- Design your full program to be completed within one year. Our program began with a summer institute and completed in the following spring. The one-year timeline had the benefit of moving change along at a quicker pace than usual.

• Build your program based on your standard operating assumptions that will become the foundation of the design.

#### People and roles:

- Find committed individuals already doing this work across campus and recruit them to be program directors.
- Connect with potential collaborators across the institution who
  introduce innovative ideas and want to be part of systemic
  change. For example, we suggest advisors, leadership centers,
  programs addressing systemic racism, and institutes focusing on
  support for UR students.
- Carefully seek out potential change agents. Choose faculty with influence whom other faculty respect and who are advanced in their careers. Andrews et al. (2016) referred to these department influences as opinion leaders.
- Center the voices of faculty from marginalized groups, but do not expect UR faculty to be solely responsible for organizational transformation.
- Remember that program directors are not the disciplinary content or unit context experts and remind the participants and administrators that the faculty are the driving force behind sustainable change in academic units.

## Program assumptions and culture:

- Acculturate participants to uphold the program's standard operating assumptions throughout the program and in their own unit leadership (e.g., strengths-based framing, analyzing structural barriers).
- Align faculty roles within your program in ways that support promotion and tenure: e.g., give participants a title and letter of completion to include in their dossier.
- Compensate faculty change agents with professional development funds, salary, or release time in recognition of these time-intensive activities. In LIL, each faculty change agent received \$4,500.

- Once you find your faculty change agents, empower them to apply their inclusive learning knowledge to the context of their units, departments, and disciplines (Corbo et al., 2016).
- Intentionally plan how you will move people from the default individual-level focus to more productive systems analysis (AAC&U, 2021; Viskupic et al., 2022).
- Normalize sharing course outcome data as an opportunity to improve rather than as a punitive measure (Elrod & Kezar, 2017).
- Understand and prepare for typical responses to change from each unit and from individual faculty who may respond to change in a variety of ways (Buller, 2014).

Whether you are a full-time educational developer, a faculty member working some of the time in your university-wide teaching center, a member of the dean's office looking for ways to decrease equity gaps in student success, or in some other role connected to equity goals, your vision could translate to building your own version of the LIL program.

# **Biographies**

Kim A. Case is Professor of Psychology at Virginia Commonwealth University. Case is currently Senior Advisor for Organizational Culture to the Vice President of Inclusive Excellence. Her research explores the systemic impact of workplace culture on social justice academics' health, performance, and retention. Her consulting work and Enough Y'all podcast focus on supporting social justice academics in tackling topics such as job crafting, values alignment, invisible labor, self-worth in the academy, impostor feelings, and defining "enough."

Allison A. Johnson is Professor of Bioinformatics at Virginia Commonwealth University (VCU) and serves as the program director for the institution's HHMI Inclusive Excellence in STEM grant. Through this grant, we established and institutionalized the Institute for Inclusive Teaching at VCU. Her research focuses on genomics of bacteriophage and the impacts of inclusive teaching strategies on STEM education outcomes.

Sarah E. Golding is an Associate Professor of Biology and Director of Undergraduate Research at Virginia Commonwealth University (VCU). Golding also leads the NIH-funded VCU research training programs Maximizing Access to Research Careers (MARC) and Bridges to the Baccalaureate. Golding's work is focused on removing barriers to participation in STEM and equitable engagement in experiential learning.

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#### Conflict of Interest Statement

The authors have no conflict of interest.

#### References

- AAC&U. (2014). Achieving systemic change: A sourcebook for advancing and funding undergraduate STEM education (C. L. Fry, Ed.). Association of American Colleges and Universities. https://www.aau.edu/sites/default/ files/AAU-Files/STEM-Education-Initiative/E-PKALSourcebook.pdf
- AAC&U. (2021). PIER: Progress towards inclusive excellence through reflection [Report]. AAC&U Inclusive Excellence Commission. https://www.hhmi.org/ sites/default/files/2023-12/PIER-Essay-2021.pdf
- Andrews, T. C., Conaway, E. P., Zhao, J., & Dolan, E. L. (2016). Colleagues as change agents: How department networks and opinion leaders influence teaching at a single research university. CBE-Life Sciences Education, 15(2). https://doi.org/10.1187/cbe.15-08-0170
- Artze-Vega, I., Darby, F., Dewsbury, B., & Imad, M. (2023). The Norton guide to equity-minded teaching. W. W. Norton.
- Bowman, M. A. (1993). The new faculty developer and the challenge of change. To Improve the Academy: A Journal of Educational Development, 12(1), 247-258. https://doi.org/10.3998/tia.17063888.0012.025
- Buchanan, D., Fitzgerald, L., Ketley, D., Gollop, R., Jones, J. L., Saint Lamont, S., Neath, A., & Whitby, E. (2005). No going back: A review of the literature on sustaining organizational change. International Journal of Management Reviews, 7(3), 189-205. https://doi.org/10.1111/j.1468-2370.2005.00111.x
- Buller, J. L. (2014). Change leadership in higher education: A practical guide to academic transformation. Jossey-Bass.
- Corbo, J. C., Reinholz, D. L., Dancy, M. H., Deetz, S., & Finkelstein, N. (2016). Framework for transforming departmental culture to support educational innovation. Physical Review Physics Education Research, 12, 010113. https://doi.org/10.1103/PhysRevPhysEducRes.12.010113
- Dewsbury, B. M. (2017). On faculty development of STEM inclusive teaching practices. FEMS Microbiology Letters, 364(18), 1-6. https://doi. org/10.1093/femsle/fnx179
- Dormant, D. (2011). The chocolate model of change. Author.
- Earl, B., Viskupic, K., Marker, A., Moll, A., Roark, T., Landrum, R. E., & Shadle, S. (2020). Driving change: Using the CACAO framework in an institutional change project. In K. White, A. Beach, N. Finkelstein, C. Henderson, S. Simkins, L. Slakey, M. Stains, G. Weaver, & L. Whitehead (Eds.), Transforming institutions: Accelerating systemic change in higher education (pp. 19-32). Pressbooks. http://openbooks.library.umass.edu/ascnti2020/chapter/earl-etal/
- Elrod, S., & Kezar, A. (2017). Increasing student success in STEM: Summary of a guide to systemic institutional change. Change: The Magazine of Higher Learning, 49(4), 26-34. https://doi.org/10.1080/00091383.2017.1357097

- Evans, L., & Chauvin, S. (1993). Faculty developers as change facilitators: The concerns-based adoption model. *To Improve the Academy:* A *Journal of Educational Development*, 12(1), 165–178. https://doi.org/10.1002/j.2334-4822.1993.tb00243.x
- Handal, G. (2007). Identities of academic developers: Critical friends in the academy? In R. Barnett & R. Di Napoli (Eds.), *Changing identities in higher education: Voicing perspectives* (pp. 55–68). Routledge.
- Henderson, C., Beach, A., & Finkelstein, N. (2011). Facilitating change in undergraduate STEM instructional practices: An analytical review of the literature. *Journal of Research in Science Teaching*, 48(8), 952–984. https://doi.org/10.1002/tea.20439
- Kezar, A. (2018). How colleges change: Understanding, leading, and enacting change (2nd ed.). Routledge.
- Kinzie, J., Gonyea, R., Shoup, R., & Kuh, G. D. (2008). Promoting persistence and success of underrepresented students: Lessons for teaching and learning. New Directions for Teaching and Learning, 2008(115), 21–38. https:// doi.org/10.1002/tl.323
- Klein, C., Lester, J., & Nelson, J. (2020). Leveraging organizational structure and culture to catalyze pedagogical change in higher education. In K. White, A. Beach, N. Finkelstein, C. Henderson, S. Simkins, L. Slakey, M. Stains, G. Weaver, & L. Whitehead (Eds.), *Transforming institutions: Accelerating* systemic change in higher education (pp. 275–285). Pressbooks. http:// openbooks.library.umass.edu/ascnti2020/chapter/klein-lester-nelson/
- Landy, K., Flaming, A. L., Tapp, S., & Kaldor, E. C. (2022). Contexts for agency: A framework for managing educational development work. *To Improve the Academy: A Journal of Educational Development, 41*(1). https://doi.org/10.3998/tia.445
- Lewin, K. (1944). Constructs in psychology and psychological ecology. *University of Iowa Studies in Child Welfare, 20,* 3–29.
- Lunenburg, F. C. (2010). Managing change: The role of the change agent. International Journal of Management, Business, and Administration, 13(1), 1–6.
- McNeill, B. (2024, October 3). VCU recognized as a Diversity Champion for sixth straight year. https://news.vcu.edu/article/2024/10/vcu-recognized-as-a-diversity-champion-for-sixth-straight-year
- Nadelson, L., Loyless, S., Mills, M., Oyeniyi, O., Albritton, S., Couture, V., Bruick, T., & Parham, C. R. (2022). Success for all? The education equity mindset of university faculty members. *International Journal of Teaching and Learning in Higher Education*, 34(1), 60–80. http://www.isetl.org/ijtlhe/
- Reinholz, D. L., & Apkarian, N. (2018). Four frames for systemic change in STEM departments. *International Journal of STEM Education*, *5*, Article 3. https://doi.org/10.1186/s40594-018-0103-x

- Reinholz, D. L., Cordo, J. C., Dancy, M., & Finkelstein, N. (2017). Departmental action teams: Supporting faculty learning through departmental change. Learning Communities Journal, 9(1), 5–32.
- Reinholz, D. L., Pilgrim, M. E., Stone-Johnstone, A., Falkenberg, K., Geanious, C., Ngai, C., Corbo, J. C., & Wise, S. B. (2021). Focus on outcomes: Fostering systemic departmental improvements. To Improve the Academy: A Journal of Educational Development, 40(2). https://doi.org/10.3998/ tia.154
- Schaffer, M. A., Sandau, K. E., & Diedrick, L. (2012). Evidence-based practice models for organizational change: Overview and practical applications. Journal of Advanced Nursing, 69(5), 1197-1209. https://doi. org/10.1111/j.1365-2648.2012.06122.x
- Viskupic, K., Earl, B., & Shadle, S. E. (2022). Adapting the CACAO model to support higher education STEM teaching reform. International Journal of STEM Education, 9, Article 6. https://doi.org/10.1186/s40594-021-00325-9
- Wise, S. B., Ngai, C., Corbo, J. C., Gammon, M. A., Rivard, J. K., & Smith, C. E. (2022). Toward institutionalizing successful innovations in the Academy. To Improve the Academy: A Journal of Educational Development, 41(1), 151-184. https://doi.org/10.3998/tia.481

## **Appendix**

#### Leaders for Inclusive Learning program structure and content

## Faculty compensation

- \$500 completion of summer institute Phase 1
- \$500 completion of DEI course evaluation process
- \$3,500 completion of LIL program (options: salary, course release, PD funds)

## Phase 1—Build a Foundation for Inclusive Teaching

#### Timing: Summer

- 2.5 days in May (virtual)
- 2.5 days in August (in person with virtual option)

## Main goals:

- individual faculty development
- gaining knowledge and skills
- taking action to incorporate inclusive practices into one course
- build a solid foundation and cohort community

# Approaches:

- participation in the established Institute for Inclusive Teaching (IIT)
- workshops
- group activities & discussions
- self-reflection exercises
- internal experts as facilitators

## Topics:

- cultural awareness
- implicit bias
- stereotype threat

- student perceptions of inclusion
- universal design
- backward design
- inclusive syllabus strategies
- inclusive course policies
- systemic barriers to student entry and progress

## Phase 2—Develop a Cohort of Change Agents

#### Timing: Fall

- cohort meetings every 2 weeks
- 7 meetings for total of 14 hours

#### Main goals:

- challenge assumptions
- analysis of systems-level & structural barriers
- strengths-based lens replaced deficit lens
- early adopters become change agents
- department-level focus: curriculum and policies

## Approaches:

- workshops
- group activities & discussions
- self-reflection exercises
- internal experts as facilitators
- one external guest speaker
- common book: Change Leadership in Higher Education (Buller, 2014)

#### Topics:

- DFW rates beyond common assumptions
- internal resistance to change
- systemic racism in education
- supporting transfer students
- barriers to leading change

- various responses to change and how to respond
- integrating support from administration
- importance of inclusive teaching

## Phase 3—Embrace Change Agent Leadership

## Timing: Spring

- cohort meetings each month
- 4 meetings for total of 8 hours
- monthly group-reflection sessions (optional)

#### Main goals:

- align roles, values, and identity
- bolster faculty confidence as leaders
- critical reflection on department culture
- identify spaces of influence and opportunity
- taking action at unit, college, university levels

## Approaches:

- workshops
- group activities & discussions
- self-reflection exercises
- department-level reflection exercises
- internal experts as facilitators
- one external guest speaker

# Topics:

- core values, roles, and identity
- leading faculty development
- using institutional data to identify equity gaps
- valuing student cultural wealth
- identifying allies and co-conspirators
- planning for department-level change
- taking first steps to implement department actions