

A Model for Crafting Diversity, Inclusion, Respect, and Equity (DIRE) Policy Statements Toward Catalyzing Organizational Change

 Cite This: *ACS Cent. Sci.* 2021, 7, 383–391

 Read Online

ACCESS |

 Metrics & More

 Article Recommendations

Carolyn Gentle-Genitty, Breanca Merrit and Ann C. Kimble-Hill

In light of the Black Lives Matter movement, the Science, Technology, Engineering, and Mathematics (STEM) community has had to reflect on how their organizations can address their disparities in identity representation. To that end, the ACS Committee on Minority Affairs (CMA) has been called upon to advise various levels of the chemistry enterprise in their interventions, such as structured and actionable policy statements. As a result, this work was created to provide a model for all organizations to write catalytic diversity, inclusion, respect, and equity (DIRE) policy statements. The model herein acknowledges active tensions and leverages theory, analysis, and practical experiences in an eight-sentence structure completed in four steps. It also provides criteria for evaluating and updating existing statements.

■ INTRODUCTION

Historically, our society and organizations have developed—consciously and unconsciously—cultures, which stratify across social identities—ethnic, racial, gender, religious, or other. The result is preferential treatment for certain identities¹ and organizational skepticism by those who do not possess those identities, particularly when a critical mass of diverse persons is absent. For employees, such skepticism may center on compatibility with long-term career goals—questioning environmental threats, biases, stereotypes, and the devaluing of different perspectives at work.^{2–10} The prior happens regardless of preferential treatment providing “an initial basis for deciding who the other is, who we are in comparison with, and therefore how each of us is likely to behave.”¹¹

One organizational sector where the disparity in identity representation and identity stereotypes has been most prominent is in science, technology, engineering, and mathematics (STEM). The demographics of the STEM workforce is disproportionate to the national average for persons of African, Hispanic/Latinx, and Native/Indigenous ancestries.¹² While there have been multiple levels of interventions to improve the diversity of the pipeline in STEM, specifically with chemistry practitioners, the number of Blacks employed in STEM has only grown from 3.5% to 4.8% from 1993 to 2015.^{13–17}

Interrupting this narrative requires a reconceptualization of inclusion fueled by an energy for change.¹⁸ Of late, in many organizations, participants felt an increased energy to mobilize and activate as the media spotlighted the very public deaths of

Black persons such as George Floyd, Breonna Taylor, Maurice Gordon, and the many others who spawned the Black Lives Matter movement. The prominence of these events galvanized organizations to survey their environments, identify internal problems and solutions, and communicate this information both internally and externally to stakeholders. These stakeholders include both the community of people who will be responsible for enacting the policy (management, leadership, workers/employees, and trainees) as well as the community consumers of the policy in both action and reaction. The most common communication vehicle used, in response, was the issuance of diversity, inclusion, respect, and equity (DIRE) statements. The results were mixed, as most were reactive, short-term, nonactionable statements. Statement developers, experts in their own right, issued statements suggesting many were untrained, unversed, and ill-prepared to apply the steps, language, and theories required for successful and meaningful outcomes. Furthermore, when organizations are devoid of relationships with those affected by the crisis, the impact of response statements is often lessened, short-lived, and cyclical.¹⁹

Published: February 23, 2021



Though well intentioned, many DIRE statements fail to initiate climate change or inclusivity as they fail to consider or understand the people and literature that should underpin them. Most are crafted only to be immediate response or position statements and designed to mitigate the blame that could be negatively attributed to the organization.^{20–22} Therefore, it is critical for an organization to understand whether their intent is to craft a response statement or a policy statement.

The difference in statement types is that **response statements** offer crisis response strategies. They are communication tools used to respond in the face of a crisis with the primary goal of protecting the organization from legal ramifications. They are not meant to protect—now nor into the future—the persons impacted by the crisis.²⁰ It is about the organization's bottom-line. **Policy statements**, on the other hand, are realistic and actionable. They are designed to provide direction for the organization as a whole especially for those who work in and for it.²³ The intended impact here is long-term—ownership of the statement is aligned with performance evaluation—leading to change in organizational structure, culture, and processes.^{24,25}

Organizations must also decide whether their statement is intended to be aspirational or actionable in nature. Aspirational statements—though not the scope of this current manuscript—are often good starting places, but organizations must not stop there. Actionable statements are preferred, but DIRE statements can also be aspirational, signaling the organization is working to achieve the goal of inclusion but that its culture may still be fraught with disparities and biases.²⁶ Actionable and realistic statements are needed. These statements lead to visible and tenable results, perhaps best when in conjunction with an operational strategic plan.

The extant literature on DIRE or diversity statements account only for their existence and potential role in institutional outcomes but offer no direction on components or steps to design such statements.^{27,28} While there may have been an uptick of literature in this space due to the current societal climate, there is currently a void in the literature toward the best practices for crafting these statements. Thus, the authors offer a model to methodically craft DIRE statements. This model employs the same doctrine of interconnection typically followed in theoretical chemistry—where theories describe the mechanism, guide the systems, and are combined in a basic model to be adapted and edited to fit the specific environmental problems, solutions, and opportunity possibilities. As a result, this model gives direction to anyone crafting actionable policy statements that can be easily applied to any scientific, and specifically chemistry, organization. The organization can then add layers to the simplicity of this model as they define their culture and objectives, complete their environmental scan, and include stakeholder concerns. Environmental scans should be initiated by leadership (particularly as a public recognition of concerns raised by stakeholders), conducted by a representative group (at least three to five persons inclusive of at least two members who would be impacted directly by the work, and those having research/data analysis skills), analyzed by institutional research partners, and shared by institutional communication partners. This ensures wide knowledge, buy-in, and full disclosure. However, the authors also note that there may be organizations that lack the internal experience in or comfort with DIRE concepts, terminology, and legalities particularly within a STEM environment. In these instances, organizations should seek to incorporate group members from external entities skilled in

DIRE training and evaluation. The outcome may also vary on the need for added emphasis around worker motivation, commitment, and productivity while grounding the work in the impacts of oppression, conflict, and social change.

This model—acknowledging active tensions that often go unnamed—leverages theory, analysis, and practical experiences. The theoretical tenets of critical race, organizational (Cohen and colleagues model), and decision-making (ETHIC model) theories undergird the base of this model for DIRE policy statement construction. The model presented here proposes an eight-sentence structure completed in four steps: (1) purpose, (2) position and methodology, (3) action and metrics, and (4) scope and reach of the statement. By implementing this model, any organization, especially scientific organization, may be able to develop and adopt actionable DIRE policy statements and demonstrate awareness to environmental factors.

■ KEY VARIABLES IN DEVELOPING DIRE STATEMENTS

A DIRE policy statement defines the role of diversity within the organization. It signals—internally and externally—a specific commitment and strategy toward inclusion and equity. DIRE policy statements frame the organization's methodology for building a respectful, engaged climate, and outrightly acknowledges the personal and community pain. It communicates that everyone associated with the organization—not just the marginalized groups—are responsible for change.

Before beginning to craft a DIRE policy statement, two preliminary notations are framed: need for an environmental scan and understanding of the burden. First, organizations must complete an *environmental scan*. The success of an environmental scan speaks to the statement's successful adoption. Identity safety research points to those in minoritized positions being leery of obvious and hidden motivations in crafting DIRE policy statements because they assume an inherent possibility that those who hold power will often exercise it in hidden ways or attempt to gain profit—often unequally distributed—at the expense of those without power.^{2,4,29,30} Thus, assessing internal and external organizational factors—threats, goals, values, strengths, challenges, change drivers, and opportunities—is a necessary preliminary step.^{31–34} Environmental scans form the evidence for framing the organization's DIRE policy statement. Scans also help to unearth the organizational pain points. Boldly doing this work exposes the two-class structure upon which most organizations are built: those with power and those without, those with valued and privileged voices and those without, oppressors and oppressed, and the haves and the have-nots. Furthermore, it ensures the statement does not overidealize a utopia of quick and successful climate change. Table 1 includes some examples of relevant environmental scanning or climate survey tools that could be used or referred to during this process.

Second, *the burden*. Organizations must acknowledge that while it is common for persons affected by DIRE policy statements to be asked to create them, they already bear a heavy burden.^{41–43} Often the same minority persons are repeatedly asked to serve on every committee or task group where diverse representation must be “shown”. With such work often unrecognized or compensated, and not part of primary job duties, these persons often have very little time to do the task for which they were hired. In academia, it may mean they fail to have extensive grant portfolios, publications, and limited

Table 1. Example DIRE Environmental Scanning Tools

diversity survey tool	application	environmental factors
academic STEM inclusion survey ³⁵	academic educators of undergraduate STEM majors	support from faculty support, approachability of administrators, classroom environment; sense of belonging in STEM; major support; and advising
engineering department inclusion level (EDIL) ³⁶	academic engineering departments	feeling welcomed, respected, valued, and supported
diversity engagement survey (DES) ³⁷	academic medicine	common purpose, trust, appreciation of individual attributes, sense of belonging, access to opportunity, equitable reward and recognition, cultural competence, and respect
measuring diversity practice & developing inclusion ³⁸	organizational workplaces	Employee perceptions of leadership (senior managers, immediate manager), values, recruitment, promotion/progression and development, fitting in, bullying/harassment, dialogue, organizational belonging, and emotional well-being
organizational & personal dimensions in diversity climate ³⁹	organizational workplaces	employee perceptions of conscientiousness, job involvement, and innovativeness across ethnicity and gender differences
multicultural school climate inventory (MSCI) ⁴⁰	secondary schools	interpersonal relationships, teaching and learning, and organizational cohesion that ensure equity, happiness, and success in schooling

innovation. For some, the burden of being stigmatized as the “diversity hire” also means they must work three to four times as hard to excel, stand out for excellence, and be recognized for their skill and knowledge.⁴² They are often tokenized, yet rarely promoted or advanced because they must continue to fill the needed “diversity slot”. We have seen that others outside the minority identities feel ill equipped to jump into diversity conversations and continue to pass-on the work. Using the DIRE model for crafting policy statements can alleviate many of the burdens and share the work. With clear steps and expected outcomes there is an opportunity to teach others, forge consistency in construction, provide evaluation, and foster organizational buy-in from all. Knowledge is thus shared enabling all relevant stakeholders to be engaged in the work.

■ DIRE POLICY STATEMENTS AS A CATALYTIC MECHANISM

Scientific organizations, from all employment sectors, are examining their methodological and psychological framing around an antiracist agenda. As they do, they are expanding their knowledge of racism and bias and making their business practices more equitable. Crafting a DIRE policy statement is often one strategy used in this reframing. DIRE policy statements enable organizations to be transparent with their work on inclusion. When made public, these statements also allow for intentional internal and external communications around the organization’s core values and organizational metrics for success. In identifying, naming, and publicly stating their position around DIRE, participants of such institutions—especially those from minoritized backgrounds who perhaps experience the most consequences from lack of or unclear statement—can present their best selves.⁴⁴ When DIRE policy statements are divorced from or weakly aligned with the organization’s advertised mission, vision, strategic plan, and employee evaluation metrics, an ugly underbelly emerges—between what is publicly stated and what exists behind closed doors—where discrimination, lost voices, nepotism, sexism, racism, and other “isms” live. Poorly constructed statements then set the stage for environments which further exclude minoritized groups.

Done well, actionable DIRE policy statements give common language around difficult topics. Because of clear parameters, it helps to lower the activation energy necessary for change in an organization. Other benefits of an actionable DIRE policy statement include providing a dialogue platform for unit based strategies; framing a structure for acknowledging and examining the impact of social inequalities; aligning institutional cultural values; communicating awareness; and identifying the

place of civil discourse, power relations, intercultural communication, conflict resolution, and leadership in the organization. Additionally, DIRE policy statements may also give voice to and social credibility for external conversations around how the community may interact with the evolving organization and its workers. Finally, DIRE policy statements offer opportunities for organizational self-assessments and examinations of its structures—historical and current, admitting imperfections but trying. Brene Brown in her book *Daring Greatly* offers the following inspiration for this type of risk-taking communication:

“When we spend our lives waiting until we’re perfect or bulletproof before we walk into the arena, we ultimately sacrifice relationships and opportunities that may not be recoverable, we squander our precious time, and we turn our backs on our gifts, those unique contributions that only we can make. Perfect and bulletproof are seductive, but they don’t exist in the human experience.”⁴⁵

In sum, the goal of using a model for crafting actionable DIRE policy statements is to catalyze the formation of a more inclusive climate, in hopes of forming democratic citizenship where all stakeholders are constantly participating in self-evaluation and awareness of behavior, where the organization is clearly communicating channels for reporting standards, repercussion for violations of those standards, and appropriate safeguards meant to protect all.⁴⁶

■ FRAMEWORKS UNDERPINNINGS THE MODEL

Two frameworks underpin this model for crafting a DIRE policy statement: (1) theoretical frameworks for understanding human interactions and societal grouping (e.g., critical race theory, theory X, Y, Z, and symbolic interaction perspective); and (2) organizational frameworks informed by decision-making theory (e.g., ETHIC model of decision-making and the garbage can model).

Theoretical frameworks. Critical race theory plays a pivotal role herein. Critical race theory is a contemporary look at the intersections of perceptions of communities of color on race and systemic sources of maintaining power structures. It explores marginalization dynamics in scenarios and appropriate methods for removing or addressing identity-specific perceptions of stereotypes, judgments, or restrictions such as increasing concentrations of similar but diverse identities. Other aspects of applying the theory have been suggested including acknowledging solution interest convergence, asset and not deficit building focusing, recognizing variability in ethnicity/race group effects and perception of policies and spaces, and affect evaluation of policies and procedures leading to reconstruction

to remove systemic favoring toward majority identities.^{47–52} It highlights concepts of conflict and power and assumptions of human motivations at work. Calmore (1992) says critical race theory challenges the thinking that the dominant social group or identity has experiences and perspectives that are universal.⁵³ It explores how authoritative standards and thoughts, or behavioral patterns are considered normal when conforming to the white experience but may be non-normative to people from groups outside of that social identity. Evident are the feelings of insecurity experienced by persons in organizations absent a critical mass of people from diverse identities—identity threat.³⁰

The interconnectedness assumptions of critical race theory and identity threat can be further explained by McGregor's organization theory on beliefs and motivation.⁵⁴ McGregor's Theory X assumes participants in institutions dislike work and thus must be coerced toward achievement. McGregor's Theory Y conversely assumes humans are self-directed and practice self-control in service only to clear objectives to which they are committed and that of which the institution shares. Participants are therefore able to contribute creatively to the solutions of the organization's problems as they are invested in the inherent good of the institution and all in it.^{54,55} Ouchi's Theory Z emphasizes collective decision-making and responsibility. Theory Z centers on three tenets: (1) I believe that you understand my point of view; (2) I believe that I understand your point of view; and (3) Whether or not I understand this decision, I will support it, because it was arrived at in an open and fair manner.^{56,57} Together, these three motivations about work—theory X, Y, and Z—frame biased perceptions of people and work fueling pain points.

The latter, Theory Z, is the position from which most DIRE policy statements are often written and thus their limitations. In failing to consider the multilayered views and positions of workers and work, it self-sabotages. If a statement fails to consider meaning through the process of interaction and participant energy activation, it has failed to meet the need for which the statement should be written. Symbolic Interaction Theory offers a redress through its three core principles: *meaning* (action or thoughts based on prior experience), *language* (means to negotiate meaning through symbols), and *thought* (modify behavior and language based on interpretation of symbols). All three principles must be incorporated intentionally within the content of a DIRE policy statement as meaning is central to human behavior and language is how humans come to identify meaning and naming—the extent of knowledge. Therefore, if DIRE policy statements are to be actionable they must invoke thoughts, grounded in meaning-making, which fosters mental shifts in role taking and views.^{58–60}

All of these theories have been presented not to redress the shortcomings of the other but to define the various perspectives that must be considered for implementation of the policy statement. Theories X, Y, and Z help frame the context for the organizational culture of work and worker expectation as an essential consideration for the implementation strategy. Symbolic Interaction Theory frames the context behind meaning, thought, and language embedded within the foundation of the organizational climate or culture. Together, they provide the necessary framework for the policy writers to write an effective and actionable tool for the organization.

Organizational Framework. An actionable DIRE policy statement includes the organization's decision-making plan for adoption. As noted herein, the organizational view of workers

fuels any decision-making strategy. Decision-making theory offers the examination of choice, criteria, and heuristics, though often riddled with value judgments.⁶¹ Objectivity in decision-making is necessary. Congress (2000) offers an ETHIC framing to remain objective. ETHIC represents the Examination of relevant values; Thinking about ethical standards, laws, case decisions; Hypothesizing about possible consequences of the decision; Identifying who will benefit and who may be harmed by the decision; and Consulting with colleagues about the most desirable outcome.^{62,63} Cohen, March, and Olsen (1972) add that if a decision is viewed as an 'outcome or interpretation of several relatively independent streams, within an organization, then the decision must include four other variables: stakeholder participants, stakeholder problems, solution responsibility, and choice opportunities.²⁹ Congress's ETHIC model frames the questions, but Cohen and Olsen add aspects that frame stakeholders and actions. Each variable is directly impacted by related streams: streams of choice, streams of problems, rate of flow of solutions, and streams of energy from participants. Our model for crafting DIRE policy statements infuses this framing.

■ MODEL FOR CRAFTING A DIRE POLICY STATEMENT

As a result of compiling the previously discussed organizational concepts (e.g., environmental scan, burden, ETHIC, Cohen tenets), the statement developer(s) can have the language necessary to apply the model using the diagrammed components in Figure 1 and craft the DIRE policy statement.

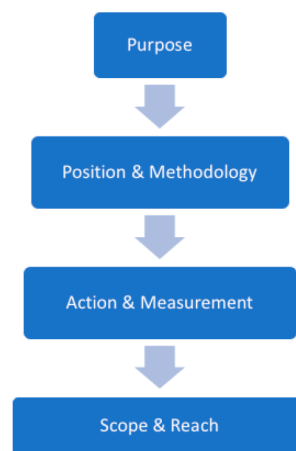


Figure 1. A model for crafting a DIRE policy statement.

The DIRE policy statement is often eight sentences organized into one cohesive paragraph. There are four distinct parts: (1) Purpose (1 sentence); (2) Position and methodology (3 sentences); (3) Action and measurement (2 sentences); and (4) Scope and reach (2 sentences). Here, we describe each step and provide a supportive example.

Step (1) Purpose. The Purpose examines the problem, people, system, and core values in the organization (Figure 2). Much of this is collected from the environmental scan and evaluation of burdens. This purpose or position information in compiled into one sentence. This first step asks the statement developer(s) to consider what problem is being solved, who are the people affected, what systems are chaffing against each other, and what is my organization's position on these

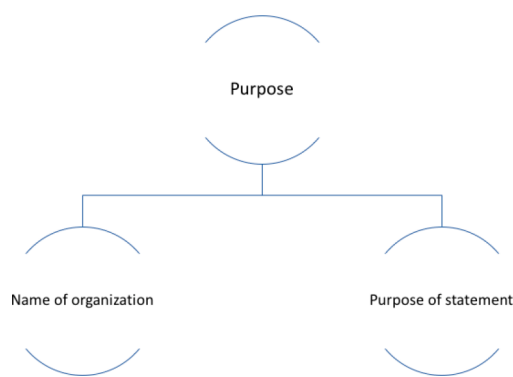


Figure 2. Step 1 - Defining the purpose of the DIRE policy statement.

questions? Using the answers to the questions, now construct the first sentence being sure to name your organization and state the purpose for the statement.

Example: (1) At Organization X, to maintain an inclusive workplace, we see no place for racism in our workplace.

Step (2) Position and Methodology. Consider using the answers from step 1 to frame the position and methodology (Figure 3). Review and answer these questions alongside the organization's core values and reward systems.



Figure 3. Step 2 - Defining the position and methodology of the DIRE policy statement.

Position and methodology uses the decision-making framework of the ETHIC model, exploration of opportunities, solutions, execution plan, and evaluation. This step includes the construction of two sentences that underpin the interconnectedness of the stakeholder and action variables within the context of the decision-making frameworks. It is in this step that the authors will distill the information about the relevant stakeholders and their related responsibilities/actions. The author must consider how the consumers of the policy must interact with it, what organizational revisions in decision-making should happen for your vision to become reality, and how external partners and community members should interpret the policy. The answers to these questions help to make the statement actionable and ready for public consumption. It also begins to frame a method for implementation. The methodology portion of this step asks that you frame your answers around the important strategic implementation questions of “who”, “how often”, “sanctions or violations”, “opportunities”, and other logistics. The language used in this section should reiterate the organization's commitment to dynamic re-evaluation of its systems and solutions. Upon considering all of these factors, authors are now ready to construct two sentences being sure to name who is impacted, your core values, methods or opportunities/units available to materialize these values, and time frame and sanctions to ensure achievement of goal.

Example: (2) [Name Organization] do not condone discrimination of any kind. (3) This statement affects all employees as we value the rights, dignity, voice, and worth of all employees.

Step (3) Action and Measurement. The action and measurement names the metrics and locale of work as three sentences (Figure 4). This third step calls the statement developer to

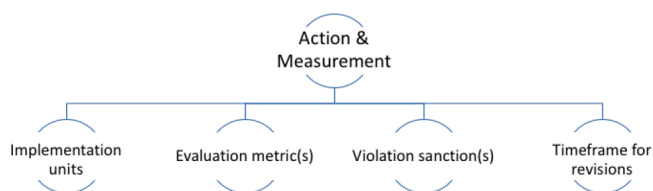


Figure 4. Step 3 - Defining the action and metrics by which the organization will evaluate their system wide implementation of the DIRE policy statement.

consider sanctions in step 2, methods proposed, plan for regular monitoring, and provisions to make the statement actionable. Consider reviewing where performance or evaluations are often done, what rewards systems are in place, and what metrics matter to employees for their time and effort, where recognition may be needed, and what impacts the organization's bottom-line.

As the three sentences are constructed, the author should be sure to include implementation units, evaluation metrics, violation sanctions, and time frame for revisions.

Example: (4) We provide a DIRE unit and reporting mechanisms to voice both successes and failures in support of these values to be reviewed annually, but efforts to be inclusive and equitable in our practices are ongoing and suggestions are welcomed anonymously via dropbox. (5) Actions taken via this statement include the addition of two metrics: (1) A metric added to all employees' performance evaluation for engagement in and support of DIRE and (2) A metric added to the organization's annual evaluation of success for support of an inclusive climate. (6)S actions for violation of this policy statement can include up to the loss of employment.

Step (4) Scope and Reach. The Scope and Reach sentences list the affected stakeholders, participation energy, terminology, and decision-making (Figure 5) and are the last two sentences. This section states explicitly the groups included or excluded in

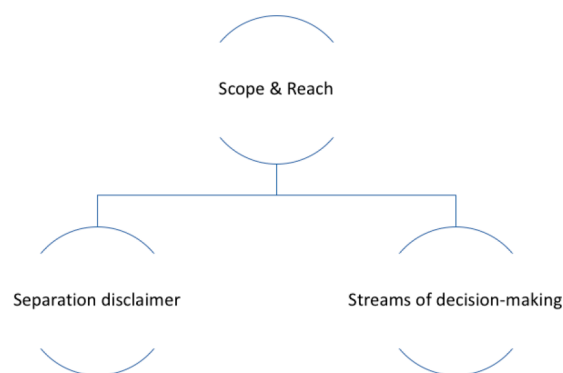


Figure 5. Step 4 - Defining the scope of the DIRE policy statement and the relevant roles of the participant stakeholders in the statement's actionable reach.

this policy. Care should be taken to include the most recent identity terminology and ensure the language does not further marginalize the affected people. Language examination or requirement for political correctness in speech and text in policy statements may appear at a nascent stage in DIRE when discussing microaggressions, slights,⁶⁴ identity-first,⁶⁵ or critical discourse^{66–68} to some. The reverse is true, as monocultural communication has permeated our history⁶⁹ forcing us to see the other as outside our genre and discourse because they do not fit our style or semiotic way of being.^{66–68} The legal field and disability conventions around personhood⁶⁵ have long required self-checking of proper language use or attention to language that invalidates, though well intentioned or subtle in form as it still discriminates. Writers unfamiliar or uncomfortable with these pitfalls should include input from their organization's support units or partners responsible for cultural competency and applicable governing laws.

This section should also define how the statement may mirror, differ, or intersect with existing institutional, state, federal, or international policies. Being mindful that adoption of only part of another policy may cause misinterpretation and mixed-messages may also occur if an entire policy or related code(s) of conduct is adopted that is in direct contradiction to each other.

Clear communication of the scope avoids questions about the intended reach and impact of the statement. As the authors craft these last two sentences, they should be mindful to name who the policy governs using common legal and statute terminology, what prior policies are supported, and who communicates streams of decision-making in participant activation energy and implementation.

Example: (7) This policy governs all groups impacted disproportionately by diversity, equity, and inclusion and upholds existing policy supporting the same, in compliance with all applicable laws and regulations. (8) All members can aid in decision-making, as organization climate is all our collective responsibility.

As a result, these different pieces of the model are synthesized into one continuous paragraph. This compilation of the four steps brings together a complete policy statement that is actionable throughout organization's strategies.

At Organization X, to maintain an inclusive workplace, we see no place for racism in our workplace. [Name Organization] do not condone discrimination of any kind. This statement affects all employees as we value the rights, dignity, voice, and worth of all employees. We provide a DIRE unit and reporting mechanisms to voice both successes and failures in support of these values to be reviewed annually but efforts to be inclusive and equitable in our practices is ongoing and suggestions are welcomed anonymously via dropbox. Actions taken via this statement include the addition of two metrics: (1) A metric added to all employee performance evaluation for engagement in and support of DIRE and (2) A metric added to the organization's annual evaluation of success for support of an inclusive climate. Sanctions for violation of this policy statement can include up to the loss of employment. This policy governs all groups impacted disproportionately by diversity, equity, and inclusion and upholds existing policy supporting the same, in compliance with all applicable laws and regulations. (8) All members can aid in decision-making as organization climate is all our collective responsibility.

Once the statement is completed, it is time to socialize the statement to share the process used for crafting and gain community input. While this new DIRE policy statement may only be eight sentences, there should also be a small library of preparatory work and evaluation that is kept alongside it. Transparency and disclosure will help others see why this work is different from other statements and the reason buy-in is now needed to foster change.

■ RECOMMENDATIONS FOR APPLICATION OF THE DIRE POLICY STATEMENT MODEL

While the DIRE policy statement model evolved from theory, analysis, and practice experience over multiple disciplines, it can be fully applied to any organization, scientific, academic, employment, or other. We recommend wide use, ongoing assessment, and research evaluations on outcomes. To demonstrate the model's use for assessment, a case example from the American Chemical Society Statement on Diversity and Inclusion is offered below:

The American Chemical Society aspires to be a diverse and inclusive community of highly skilled chemical professionals. We encourage inclusivity and oppose discrimination in scientific learning and practice based on—but not limited to—race, religion, country or ethnic origin, citizenship, language, political opinion, sex, gender identity and expression, sexual orientation, disability, age, and economic class in academic, industrial, and government workplaces. The Society believes that an enduring commitment to diversity enables excellence, innovation, and transformative action in current and future generations of chemical professionals. As a global scientific society, we affirm the international principles that the responsible practice of science, free from discrimination in all of its forms, is fundamental to scientific advancement and human well-being, as outlined by the International Council for Science's (ICSU) Statute 5.⁷⁰ We also affirm our commitment to a scientific environment that facilitates the execution and communication of scientific work with integrity, fairness, and transparency at all organizational levels. This extends to our general scientific endeavors—including our professional interactions and engagement with other scientists, trainees, and the general public. We recognize that harm to our profession, our scientific credibility, individual wellbeing, and society is caused by not doing so. To this end, the Society will implement the principles of diversity, inclusivity, and equity within ACS leadership and membership to build a community across the chemical enterprise. We are committed to quantifying and monitoring our diversity. (Approved in 2017)

Assessment of Statements. While the case example is undergoing revision, many of its elements are reflected in the presented model. Therefore, we will use it as a template to show how each step described in Figures 2–5 can then serve as criteria for evaluating the organization specific work that results from using the presented model.

The ACS statement offers an aspirational purpose; it uses position and methodological language and presents a scope of the work. Specifically, the first sentence fulfills **step 1** because it names the organization and describes the purpose of the statement.

On evaluating **step 2**, the position and methodology are stated but in a flipped order when compared to the recommended DIRE model. Notice in the second sentence

the core values of the organization⁷¹ are shared and the aspirational values of the society are mentioned via a reference to the ICSU Statute 5.⁷⁰ As the ACS is a society with global reach, the incorporation of the ICSU values met the model criteria. However, other organizations should also include verbiage on their fidelity in accepting the totality of such values at all organization locations. As such, a disclaimer sentence would be beneficial as identified in step 4 of this model. ACS's position on DIRE is stated in the third sentence. The sixth sentence addresses the stakeholders, in this case the external stakeholders. Organizations that adopt this approach should also incorporate language to define the internal stakeholders and their roles in the actions and evaluation of the success of the statement.

Step 3 of the model requires a high-level definition of the actionable strategies and evaluation metrics. The ACS statement affirms its commitment toward a standard for its scientific community. In many ways, this sentence offers a criteria/metric, but the matched or related activities could be named. Other authors should consider specifically naming the unit(s) responsible for implementation and evaluation to strengthen the organization's commitment to the policy statement. While it is implied that the statement aligns with the strategic plan and that all society leadership and membership will uphold the policy statement, adding more specifics can help in implementation success as well as provide an accurate view of the scope of sanctions possible for violation of the policy. Authors could use language similar to that already stated in the ACS's approved codes of conduct and governing documents.^{72–74} The final two sentences of this statement contain language that lends toward this goal. Authors can also improve the perceived commitment to the statement by articulating the frequency by which the statement may be revised.

As organizations become clear about their intent toward action, they could also use **step 4** of this model to include more action-focused deliverables, a disclaimer toward use of existing policies to which society members may be held, and refining communication streams of decision-making.

We suggest all organizations that have statements in place now undergo a similar assessment with an eye toward adopting this model to strengthen the long-term strategies that their organization will undertake to infuse DIRE into daily operations.

■ CONCLUDING REMARKS

DIRE policy statements give context for leadership conversations around inclusivity, meaningful engagements, and intersections of identities—race, gender, sexual orientation, religion, and other social identities. DIRE policy statements also help organizational leaders communicate and lead discussions when sensitive topics infringe on the perception of rights-based actions around respectful justice. As organizations embark on the task of using this model, they should remember that leadership characteristics and organization structure influence DIRE policy statement adoption.^{75–78} As authors are following the model, they should take care to integrate language toward equitable practices within all aspects of the organization and strategies.

Finally, the best way to ensure effective and actionable DIRE policy statements is to include all levels of representation in decision-making. Not all minority groups are the same, and while they may share some commonalities in experience, they cannot have the responsibility of speaking for all. They also

cannot bear the entire burden of an inclusive climate alone. While having long-term DIRE progress, this process of crafting the statement can give often marginalized stakeholders a platform for their voice to be heard, their pain to be acknowledged, and their perspectives to be included within the shared organizational values. We learn more and expand our perspectives by having others with different identities with a voice at the decision-making table. This diversity of thought and perspective will also help the crafting process to remain ethical and transparent. Therefore, it is imperative that organizations adopt this inclusive model as a guide through crafting an actionable, inclusive, and viable DIRE policy statement.

■ AUTHOR INFORMATION

Corresponding Author

Ann C. Kimble-Hill – Department of Biochemistry and Molecular Biology, Indiana University Purdue University Indianapolis, Indianapolis, Indiana 46202, United States; orcid.org/0000-0001-9575-5454; Email: ankimble@iu.edu

Authors

Carolyn Gentle-Genitty – School of Social Work, Indiana University Purdue University Indianapolis, Indianapolis, Indiana 46202, United States

Breanca Merrit – Center for Research on Inclusion and Social Policy and O'Neil School of Public and Environmental Affairs, Indiana University Purdue University Indianapolis, Indianapolis, Indiana 46202, United States

Complete contact information is available at: <https://pubs.acs.org/10.1021/acscentsci.0c01533>

Author Contributions

The manuscript was written through contributions of all authors.

Notes

The authors declare no competing financial interest.

■ ACKNOWLEDGMENTS

The authors are thankful to Drs. Raychelle Burke and Shari Watkins (American University) for early discussions on content framing.

■ ABBREVIATIONS

DIRE Diversity, Inclusion, Respect, and Equity

ACS American Chemical Society

CMA Committee on Minority Affairs.

■ REFERENCES

- (1) Steele, C. M.; Spencer, S. J.; Aronson, J. Contending with group image: The psychology of stereotype and social identity threat. In *Advances in Experimental Social Psychology*; Academic Press, 2002; Vol. 34, pp 379–440.
- (2) Cohen, G. L.; Garcia, J. Identity, Belonging, and Achievement: A Model, Interventions, Implications. *Current Directions in Psychological Science* **2008**, *17* (6), 365–369.
- (3) Walton, G. M.; Brady, S. T. The many questions of belonging. In *Handbook of Competence and Motivation: Theory and Application*, 2nd ed.; The Guilford Press: New York, NY, US, 2017; pp 272–293.
- (4) Walton, G. M.; Cohen, G. L. A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology* **2007**, *92* (1), 82–96.

- (5) Correll, S. J. Constraints into Preferences: Gender, Status, and Emerging Career Aspirations. *American Sociological Review* **2004**, *69* (1), 93–113.
- (6) Davies, P. G.; Spencer, S. J.; Steele, C. M. Clearing the Air: Identity Safety Moderates the Effects of Stereotype Threat on Women's Leadership Aspirations. *Journal of Personality and Social Psychology* **2005**, *88* (2), 276–287.
- (7) Greenhaus, J. H.; Parasuraman, S.; Wormley, W. M. Effects of Race on Organizational Experiences, Job Performance Evaluations, and Career Outcomes. *Acad. Management J.* **1990**, *33* (1), 64–86.
- (8) Niemann, Y. F.; Dovidio, J. F. Relationship of solo status, academic rank, and perceived distinctiveness to job satisfaction of racial/ethnic minorities. *Journal of Applied Psychology* **1998**, *83* (1), 55–71.
- (9) Niemann, Y. F.; Dovidio, J. F. Tenure, Race/Ethnicity and Attitudes toward Affirmative Action: A Matter of Self-Interest? *Sociological Perspectives* **1998**, *41* (4), 783–796.
- (10) Penner, A. M.; Saperstein, A. Engendering Racial Perceptions: An Intersectional Analysis of How Social Status Shapes Race. *Gender & Society* **2013**, *27* (3), 319–344.
- (11) Ridgeway, C. L.; Kricheli-Katz, T. Intersecting Cultural Beliefs in Social Relations: Gender, Race, and Class Binds and Freedoms. *Gender & Society* **2013**, *27* (3), 294–318.
- (12) Fadeyi, O. O.; Heffern, M. C.; Johnson, S. S.; Townsend, S. D. What Comes Next? Simple Practices to Improve Diversity in Science. *ACS Cent. Sci.* **2020**, *6* (8), 1231–1240.
- (13) *Advancing Diversity and Inclusion in Higher Education: Key Data Highlights Focusing on Race and Ethnicity and Promising Practices*; United States Department of Education. Office of Planning, Evaluation and Policy Development, 2016.
- (14) Wilson-Kennedy, Z. S.; Byrd, G. S.; Kennedy, E.; Frierson, H. T. *Broadening Participation in STEM: Effective Methods, Practices, and Program*, 2019.
- (15) Kanipes, M. I.; Tang, G.; Spencer-Maor, F. E.; Wilson-Kennedy, Z. S.; Byrd, G. S.; Wilson-Kennedy, Z. S.; Byrd, G. S.; Kennedy, E.; Frierson, H. T. *Broadening Participation in STEM: Effective Methods, Practices, and Programs*, 2019; p 55.
- (16) Wilson-Kennedy, Z. S.; Payton-Stewart, F.; Winfield, L. L. Toward Intentional Diversity, Equity, and Respect in Chemistry Research and Practice. *J. Chem. Educ.* **2020**, *97* (8), 2041–2044.
- (17) Winfield, L. L.; Thomas, G.; Watkins, L. M.; Wilson-Kennedy, Z. S. *Growing Diverse STEM Communities: Methodology, Impact, and Evidence*, 2019.
- (18) Zion, S. D.; Blanchett, W. [Re] Conceptualizing Inclusion: Can Critical Race Theory and Interest Convergence Be Utilized to Achieve Inclusion and Equity for African American Students? *Teachers College Record* **2011**, *113* (10), 2186–2205.
- (19) Jaques, T. Issue management as a post-crisis discipline: identifying and responding to issue impacts beyond the crisis. *Journal of Public Affairs* **2009**, *9* (1), 35–44.
- (20) Brown, K. A.; White, C. L. Organization–Public Relationships and Crisis Response Strategies: Impact on Attribution of Responsibility. *Journal of Public Relations Research* **2010**, *23* (1), 75–92.
- (21) Coombs, T. *Ongoing Crisis Communication: Planning, Managing and Responding*, 2007.
- (22) Weiner, B. An attributional theory of achievement motivation and emotion. *Psychology Review* **1985**, *92*, 548–573.
- (23) Wright, C. Chapter 6 - Security Policy Overview. In *The IT Regulatory and Standards Compliance Handbook*; Wright, C., Ed.; Syngress: Burlington, 2008; pp 115–147.
- (24) Bartkus, B. R.; Glassman, M. Do Firms Practice What They Preach? The Relationship Between Mission Statements and Stakeholder Management. *Journal of Business Ethics* **2008**, *83* (2), 207–216.
- (25) Darbi, W. P. K. Of mission and vision statements and their potential impact on employee behaviour and attitudes: The case of a public but profit-oriented tertiary institution. *Int. J. Business Social Sci.* **2012**, *3* (14).
- (26) Carnes, M.; Fine, E.; Sheridan, J. Promises and Pitfalls of Diversity Statements: Proceed With Caution. *Academic Medicine* **2019**, *94* (1), 20–24.
- (27) Wilson, J. L.; Meyer, K. A.; McNeal, L. Mission and Diversity Statements: What They Do and Do Not Say. *Innovative Higher Education* **2012**, *37* (2), 125–139.
- (28) Wilton, L. S.; Good, J. J.; Moss-Racusin, C. A.; Sanchez, D. T. Communicating more than diversity: The effect of institutional diversity statements on expectations and performance as a function of race and gender. *Cultural Diversity and Ethnic Minority Psychology* **2015**, *21* (3), 315–325.
- (29) Cohen, M. D.; March, J. G.; Olsen, J. P. A Garbage Can Model of Organizational Choice. *Administrative Science Quarterly* **1972**, *17* (1), 1–25.
- (30) Murphy, M. C.; Steele, C. M.; Gross, J. J. Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings. *Psychological Science* **2007**, *18* (10), 879–885.
- (31) Kulshrestha, S.; Puri, P. Tows Analysis for Strategic Choice of Business Opportunity and Sustainable Growth of Small Businesses. *Pacific Business Review Int.* **2017**, *10* (5), 144–152.
- (32) Weihrich, H. The TOWS matrix—A tool for situational analysis. *Long Range Planning* **1982**, *15* (2), 54–66.
- (33) Sarsby, A. *SWOT Analysis*. Lulu.com, 2016.
- (34) Trainer, J. F. Models and tools for strategic planning. *New Directions for Institutional Research* **2004**, *2004* (123), 129–138.
- (35) De Grandi, C.; Smithline, Z. B.; Reeves, P. M.; Goetz, T. G.; Barbour, N.; Hairston, E.; Guo, J.; Muraina, F.; Bervell, J. A.; Chambers, L. M.; Caines, H.; Miranker, A. D.; Mochrie, S. G. J. STEM Climate survey developed through student–faculty collaboration. *Teaching in Higher Education* **2021**, *26* (1), 65–80.
- (36) Lee, W. C.; Matusovich, H. M.; Brown, P. R. Measuring underrepresented student perceptions of inclusion within engineering departments and universities. *Int. J. Eng. Educ.* **2014**, *30* (1), 150–165.
- (37) Person, S. D.; Jordan, C. G.; Allison, J. J.; Fink Ogawa, L. M.; Castillo-Page, L.; Conrad, S.; Nivet, M. A.; Plummer, D. L. Measuring Diversity and Inclusion in Academic Medicine: The Diversity Engagement Survey. *Acad. Med.* **2015**, *90* (12), 1675–1683.
- (38) April, K.; Blass, E. Measuring diversity practice and developing inclusion. *Dimensions* **2010**, *1* (1), 59–66.
- (39) Mor Barak, M. E.; Cherin, D. A.; Berkman, S. Organizational and Personal Dimensions in Diversity Climate: Ethnic and Gender Differences in Employee Perceptions. *Journal of Applied Behavioral Science* **1998**, *34* (1), 82–104.
- (40) Marx, S.; Byrnes, D. Multicultural school climate inventory. *Current Issues in Education* **2012**, *15* (3).
- (41) Joseph, T. D.; Hirshfield, L. E. 'Why don't you get somebody new to do it?' Race and cultural taxation in the academy. *Ethnic and Racial Studies* **2011**, *34* (1), 121–141.
- (42) Nair, S. Women of Color Faculty and the "Burden" of Diversity. *International Feminist Journal of Politics* **2014**, *16* (3), 497–500.
- (43) Porter, K. B.; Posselt, J. R.; Reyes, K.; Slay, K. E.; Kamimura, A. Burdens and benefits of diversity work: emotion management in STEM doctoral students. *Studies in Graduate and Postdoctoral Education*, 2018.
- (44) Leath, S.; Mathews, C.; Harrison, A.; Chavous, T. Racial Identity, Racial Discrimination, and Classroom Engagement Outcomes Among Black Girls and Boys in Predominantly Black and Predominantly White School Districts. *American Educational Research Journal* **2019**, *56* (4), 1318–1352.
- (45) Brown, B. *Daring Greatly: How the Courage to Be Vulnerable Transforms the Way We Live, Love, Parent, and Lead*; Penguin, 2015.
- (46) Gurin, P.; Nagda, B. A.; Lopez, G. E. The Benefits of Diversity in Education for Democratic Citizenship. *Journal of Social Issues* **2004**, *60* (1), 17–34.
- (47) Donnor, J. K. *Education as the Property of Whites: African Americans Continued Quest for Good Schools*, 2013.
- (48) Bondi, S. Students and Institutions Protecting Whiteness as Property: A Critical Race Theory Analysis of Student Affairs

Preparation. *Journal of Student Affairs Research and Practice* **2012**, *49* (4), 397–414.

(49) Alcoff, L. M. Latino/as, Asian Americans, and the Black–White Binary. *Journal of Ethics* **2003**, *7* (1), 5–27.

(50) Solórzano, D. G.; Yosso, T. J. Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research. *Qualitative Inquiry* **2002**, *8* (1), 23–44.

(51) Baber, L. D. Considering the interest-convergence dilemma in STEM education. *Review of Higher Education* **2015**, *38* (2), 251–270.

(52) O'Hara, R. M. STEM(ing) the Tide: A Critical Race Theory Analysis in STEM Education. *Journal of Constructivist Psychology* **2020**, 1–13.

(53) Calmore, J. O. Critical race theory, Archie Shepp, and fire music: Securing an authentic intellectual life in a multicultural world. *S. Cal. L. Rev.* **1991**, *65*, 2129.

(54) McGregor, D. Theory X and theory Y. *Organization Theory* **1960**, *358*, 374.

(55) Harris, D.; Sorensen, P.; Yaeger, T. F. Management Consulting through the work of Dick Beckhard: Improving Client's Lives. *Academy of Management Proceedings* **2018**, *2018* (1), 10380.

(56) Schriver, J. M. *Human Behavior and the Social Environment: Shifting Paradigms in Essential Knowledge for Social Work Practice*; Allyn & Bacon, 1995.

(57) Robbins, S. P. The Theory Z Organization from a Power-Control Perspective. *California Management Review* **1983**, *25* (2), 67–75.

(58) Aksan, N.; Kısac, B.; Aydın, M.; Demirbuken, S. Symbolic interaction theory. *Procedia - Social and Behavioral Sciences* **2009**, *1* (1), 902–904.

(59) Blumer, H. *Symbolic Interactionism: Perspective and Method*; University of California Press, 1986.

(60) Herbert, B. *Symbolic Interactionism*; University of Carolina Press: Berkley et Los, 1972.

(61) Campitelli, G.; Gobet, F. Herbert Simon's Decision-Making Approach: Investigation of Cognitive Processes in Experts. *Review of General Psychology* **2010**, *14* (4), 354–364.

(62) Congress, E. P. What social workers should know about ethics: Understanding and resolving practice dilemmas. *Social Work Ethics* **2000**, *1*, 1.

(63) Congress, E. P. *Ethics and Values in the Health Field. Health and Social Work: Practice, Policy, and Research*, 2018.

(64) Nair, N.; Good, D. C.; Murrell, A. J. Microaggression experiences of different marginalized identities. *Equality, Diversity and Inclusion: An International Journal* **2019**, *38* (8), 870–883.

(65) Dunn, D. S.; Andrews, E. E. Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *Am. Psychol.* **2015**, *70* (3), 255–264.

(66) Fairclough, N. Critical Discourse Analysis and the Marketization of Public Discourse: The Universities. *Discourse & Society* **1993**, *4* (2), 133–168.

(67) Fairclough, N. *Critical Discourse Analysis: The Critical Study of Language*; Routledge, 2013.

(68) Wodak, R.; Fairclough, N. *Critical Discourse Analysis*; Sage Los Angeles, 2013.

(69) Bennett, M. J. Intercultural communication: A current perspective. In *Basic concepts of intercultural communication: Selected readings*; 1998; Vol. 1, pp 1–34.

(70) *Principle of Universality of Science*; International Council for Science (ICSU): Paris, France, 2017.

(71) American Chemical Society Strategic Plan for 2018 and Beyond; American Chemical Society, 2018.

(72) American Chemical Society. Chemical Professional's Code of Conduct. <https://www.acs.org/content/acs/en/careers/career-services/ethics.html>.

(73) American Chemical Society. Global Chemists Code of Ethics. <https://www.acs.org/content/acs/en/careers/career-services/ethics.html>.

(74) American Chemical Society Charter, Constitution, Bylaws, Standing Rules, and Regulations of the American Chemical Society. American Chemical Society, 2020.

(75) Sabharwal, M. Is Diversity Management Sufficient? Organizational Inclusion to Further Performance. *Public Personnel Management* **2014**, *43* (2), 197–217.

(76) Kroll, A. Can performance management foster social equity? Stakeholder power, protective institutions, and minority representation. *Public Administration* **2017**, *95* (1), 22–38.

(77) Gooden, S. T. *Race and Social Equity: A Nervous Area of Government*; Routledge, 2015.

(78) Abramovitz, M.; Blitz, L. V. Moving Toward Racial Equity: The Undoing Racism Workshop and Organizational Change. *Race and Social Problems* **2015**, *7* (2), 97–110.