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Establishing a New Paradigm for Diversity: A Case for Restructuring the Academic Training Environment

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Overview

In the academic arena, like most other areas, we are consistently challenged by issues around diversity and inclusion. Institutional responses have been many and varied, and a vast number lack demonstrated commitment, efficacy, and/or a sustainable plan for successfully addressing the real concerns. Diversity has many connotations and contexts, but often, by default, is taken to infer issues of race. It can be thought of as a Trojan horse, that once released, can rain down a host of new policies, procedures and guidelines upon an unenlightened and unprepared institution or discipline. The need for promoting inclusion compliments and extends the definition and context of diversity to include considerations of ethnicity, culture, and socioeconomic status, among others. In the ever-expanding global society and 'knowledge economies' issues around diversity are likely to become much more complex and difficult to define.

Globalization, along with advances in science and technology, has contributed significantly to rapidly evolving changes in population demographics. This presents a major challenge for many organizations and entities within our society with regard to addressing the needs of increasingly diverse and disparate groups. In the past, it was easy to implant a "token" minority group representative, such as a scientist into the laboratory; an indication of meeting the legal mandates of Affirmative Action. For example, inviting an African American neuroscientist into a departmental meeting was telling the world "We have come of age, we embrace diversity; see our display!" Afterwards, organizations or disciplines would pat themselves on the back and claim to be socially and politically enlightened with little or no institutional oversight. One area where this has been clearly apparent, despite repeated local and national mandates and years of significant fiscal investments, is within the scientific training environment of major academic institutions. Now, however, times are changing, with the tendency more towards institutions accurately demonstrating and accounting for inclusiveness and diversity among all its stakeholders, faculty, staff and students.

These issues have always been met with resistance and skepticism. The need for revisiting the concept of diversity has become, in the eyes of many, old hat; a relic of the past when inclusion, Affirmative Action, quotas, and multiculturalism were all buzz words that were considered more of a legal mandate than a freedom of choice. However, left to choice and 'free will,' the need and impetus for change would largely be ignored. Now, we

enter a new era, a renaissance, where diversity is no longer a dirty word to fear, but rather a legitimate method of operation where new paradigms can emerge and be accommodated through open dialogue, consensus activities, leadership and inclusiveness - setting up systematic institutional processes to embrace and address societal needs and foster growth and advancement through knowledge sharing in an environment rich in progressive thoughts and new ideas.

Economic Costs and Educational Inequities

To some, diversity infers providing access and opportunity to all those who are under-resourced and likely less fortunate. To others, the idea of embracing diversity signifies opening doors to those who have been disenfranchised, regardless of the reasons. And, to others, diversity means let us get rid of the "good ole boy network." Regardless of one's perspective, never has diversity meant that the great citadels of teaching and learning would serve as open access portals to all those who entered their grand halls. Never were they only for the best and brightest. Never was there a time when they were only for the impassioned; and never were they for the faint of heart. Rather, these ornate cathedrals of learning flamed the spirits and passions, excluded or embraced, the likes of William Shakespeare, Benjamin Franklin, Thomas Hobbs, Rosa Parks, William James, W.E.B. Du bois, Thurgood Marshall, and Martin Luther King.

From philosopher to scientist, artist to civil rights activist and everything in between, great thinkers long ago pushed for a reawakening, a new era of learning, a new Renaissance of sorts, in which the embrace of diverse thoughts, disciplines, cultures and challenges were not only discouraged, but were also, at times, illegal to endorse. These ideologies eventually led to a cultural groundswell in which specialization and exclusion had few allies and interdisciplinary, inter- and cross-cultural thinking reigned supreme. This same philosophical embrace, this new Renaissance is once again upon us, not masked in a different form, but rather, packaged as an evolving paradigm in which we may all, both scientist and lay person alike, appreciate its genuine nectar of honesty and fairness. This is the new 'diversity' perspective, one which transcends the legally mandated race/ethnicity biases inherent in Affirmative Action.

However, although history has shown us the hurdles we must overcome, the formidable and sinister task of limiting inequities and disparities in areas of commerce, economics, and education remains daunting. The limited

extent of diversity among existing undergraduate Neuroscience training programs reflects many of the challenges. Broadly, it suggests academic institutions must better define the structural and operational framework for current diversity models. This will help to avoid intentional, consequential and/or perceptual inequities that may impact the next cohort of neuroscience students who may appear different, but with the potential to succeed, even if they have not worked within the best laboratories or attended the most well recognized neuroscience programs. Their choices toward opportunity and potential to successfully navigate in such career fields may be hindered or narrowed, in part, by dated institutional policies and lack of commitment around diversity implementation; hence, the inequities persist.

As we reflect on the field of neuroscience, exponential strides have been made in expanding professional and student membership in the field. Starting out in 1969 with only 500 members, the Society for Neuroscience (SFN) now boasts over 39,000 members as of 2008. This growth is attributable, in part, to academic programs that have developed an array of sub-specializations. However, aside from these increases, there continues to be recognition that diversity in the neurosciences remains a challenge and, as such a mandate for future action. Many scientific organizations continue to struggle with this issue. The American Psychological Association and ANDP are examples of organizations with a history of neuroscience diversity programs, however, both still remain concerned for their long term sustainability. Among the key issues of concern to mention a few are environmental readiness, levels of engagement, stereotype threats and perceptions of competence.

The continued awareness of the need for diversity programs seems to argue that economic choice is no longer a barrier in accessing neuroscience opportunities for promising young and creative student-scientists. Rather, the major questions become, "How can one address limited access when diversity is encouraged but not necessarily operationalized or well understood?" Or, "What are the economic costs in educating the students with fewer resources, which may bring with them additional costs as compared to educating students with greater resources?"

While these questions may merit thorough analyses, they also give rise to another dimension around the diversity matrix, namely, the factors critical in assessing educational inequity that goes beyond merely stating the need for increasing diversity.

What is Educational Inequity?

It is often said that "the road to hell is paved with good intentions." This could not be more timely and true today. Before we can effectively address the possible myriad of issues behind well-intentioned programs, we must first be willing to set forth a conceptual framework that will, theoretically, guide well intentioned administrators down the correct paths - those no longer fraught with recognizable historical atrocities. The goals should include

changing stereotype environmental threats, clarifying issues of competency and enhancing student self-efficacy.

Embedded within any successful Predominately White Institution (PWI) diversity program should be, first and foremost, a recognition that "educational inequities" clearly and definitively exist. Once this is established through evidence-based data, a series of four critical elements should be embraced across institutional structures relative to their function: 1) build internal consensus and capacity, 2) develop clear and operational goals and objectives, 3) define audience/opportunity for action, and 4) develop message and mission around "diversity."

The first function is already well established and enjoyed throughout many academic institutions. However, the need for building internal consensus and capacity requires that any "diversity program" must first and foremost establish a working definition of "diversity," which means different things to different people. Diversity programs aligned around recruitment, targeted opportunities, etc., are but a few examples. Effectively implementing such programs can, at times, be suspect and far more challenging than anticipated, especially if initial consensus was not achieved at all levels of the organizational structure.

Assuming that the diversity programs are most likely well-intentioned and well meaning, this can leave an administrator or academic society scrambling to then answer "how are they measured?" or "how effective are these programs relative to their actual intent or outcomes?" These questions lead to the second critical element/criteria, "developing clear goals/objectives." A well-meaning, well-intentioned program needs to be, at a minimum, outcome-oriented and measurable. Such objectives, which can serve as indicators, may include, but are not necessarily limited to, the number of students and/or neuroscientists selected based on: international residence, culture, economic background, geography, ethnicity, or any other measure that can effectively reflect a diverse pool of neuroscience students.

Another critical element that needs to go into a new paradigm for diversity is the recognition that the audience or target group we are trying to reach must be clearly defined (e.g., ethnically, culturally, demographically, geographically, etc.) and that there are unambiguously stated opportunities for action—in other words, services to help accommodate a new program around recruitment for diversity and subsequent development. To have a program on paper but no resources or action plan to implement the program is like a law with no teeth or a fire fighter with no water. In effect, all of these preceding elements depend on whether the last, but not least important element is echoed throughout the institution or program—specifically, the need for "consistency." The same message must be espoused not only by senior administrators and members of the scientific community, but by staff and faculty stakeholders. Beyond theory and rhetoric, everyone in the institution should endorse and understand the new diversity program goals, intent and mission.

Highlight Key Policies/Initiatives (Promising)

For any diversity program to be truly effective, successful and institutional, a structural system must be in place that actively authors and oversees policies, procedures, practices, and guidelines that require adherence to the rules and regulations established within the program. This approach serves to strengthen logistical systems as well as helps in the acquisition of greater resources for the program or institution. If carefully considered, it will serve the mission of an organization or academic society well by demonstrating how rooted and integrated the program is to the institution's strategic plans and infrastructure.

Develop Collective Strategies to Produce Change and Provide Real, Mutually Beneficial Opportunities

Once a diversity program has met the initial criteria alluded to earlier (consensus, measurable goals and objectives, defined audience, and a consistent message, as well as the institutionalization of policies, procedures and guidelines) only then can collective strategies be developed to help produce real change. Initially, five critical factors are necessary, if not essential, when developing and institutionalizing an effective diversity program: 1) strategic institutional assessment, 2) analysis of issues and concerns, 3) development and design of programs to accelerate progress to change culture, 4) take lead role in establishing real partnerships, and 5) development of "tools for action."

First, conducting an "impact assessment" or "gap analysis" provides the baseline data needed to more effectively determine the need for and/or status of an existing diversity agenda. A determination of what exists versus what is needed can help identify gaps, whereas an impact assessment can yield outcomes of an existing program, if any. The second factor, for all intents and purposes, very much depends on the environment in which a diversity program resides or is to be implemented. An environment that is genuinely concerned about increasing the number of highly qualified neuroscientists and neuroscience students should fully endorse an in-depth analysis of the organizational environment and culture. However, it is critical that this type of analysis be conducted openly and fairly without implied or real punitive or negative consequences, otherwise, no one will honestly participate. It should be noted that this does not only apply to mainstream PWI institutions but also Minority Serving Institutions that are charged with institutionalizing diversity programs. Of course, this is based on the realization that Xenophobia or ethnic biases are not limited only to mainstream institutions or academic societies. We should all be cognizant of the fact that these can transcend the halls of any environment, regardless of mission or charge.

With respect to the third element of accelerating progress and changing culture, this approach sets forth that diversity programs require that institutional culture undergo 'paradigm shifts' at the organizational, professional, environmental, and individual levels. That is, buy-in must be broad and the process multidimensional. To only institutionalize change at one level undermines the

program's potential sustainability. Many flawed diversity programs have lasted for years. However, often associated with these are "token" representatives of affirmative or diversity acts that have been held out as examples; yet, they too, have shared in perpetuating a misguided and misaligned agenda. Thus, it is time to move beyond the Band-Aid solutions and work towards truly sustainable, institutionalized programs, not mirroring old practices. Future programs must have a new framework guided by a new paradigm that can help to foster genuine inclusiveness and progress beyond race and ethnicity.

Once steps to transform the institutional culture have been undertaken (e.g., developing new diversity policies, procedures, and guidelines across various levels), only then can effective leadership be demonstrated by means of proactive partnerships, especially with Minority Serving Institutions. In essence, this type of leadership requires that senior administrators and academic society leaders commit to active engagement in various partnerships by developing appropriate "tools for action." This last element sets the stage for creating a toolbox or smorgasbord of sorts, for diversity training and recruitment. This approach goes way beyond the norm of simply creating a "diversity program" to recruit and train students in science using standard approaches and requirements.

To validate and perpetuate organizational change across processes, outcomes, and culture, the effective leader would, ideally, create a pull down menu of choices in deciding how best to implement training programs that genuinely reflect unique diversity (the choices would grow based on the partnerships that provide input into the process). This approach may, in effect, contribute to reducing typical environmental stereotype threats, which can be sustained by organizing retreats, rewriting policies, procedures and/or guidelines, advocating for capacity-building innovative programs and partnerships, and collaborating across diverse disciplines.

Is there a State of Inequality on Your Campus?

With regard to diversity program implementation, the question as to the extent of your campus diversity needs should logically follow after initial needs assessment. This strategy provides the administrators with objective evidence to support their strategic planning process. In short, the administrator would be approaching this diversity assessment issue more inductively.

Once the issue is established as to whether a state of inequity on campus does or does not exist, a series of other important questions would need to be addressed. Among these: "are the diversity issues real or perceived?" or, "is there training disparity or inequity within the structure of the program or institution?" If the responses to these questions are in the affirmative, one final yet most important question will still need to be asked and answered, namely: "what are the consequences?" The success of diversity training programs often requires overcoming deeply rooted beliefs among target groups as well as in the training environment.

Issues of ability and competency are inherent to the perceptions of under-represented minority trainees within the PWI environment. Such concerns about the perceived competency level of the trainee as well as their sense of inclusion when introduced into a new PWI environment all play into the psychology of the trainees and those in the training environment. In essence, we contend that as the need for diversity programs grow in response to population demographic changes, the misconceptions held by many regarding those in the minority communities will have to be modified.

Benefits in Establishing a New Diversity Paradigm

A well designed and positively promoted diversity program brings with it a plethora of benefits that could yield positive outcomes for the trainee as well as the environment, scientific society or institution. Three salient features are characteristic of an effective and balanced diversity program. These are: 1) the rich cultural heritage of the recruits and their unique experiences, 2) the celebration of diversity internally and externally through councils, teams, and institutionalized program promotions, and 3) openly embracing inclusion of all groups in recruitment and programmatic development.

People from diverse populations bring with them a vast richness in cultural heritage. Diversity programs that capitalize on the strengths of trainees, and less on why they were recruited, begin to foster or earn credibility for fairness and equality. Inviting neuroscientists from both minority and major institutions can also significantly strengthen the credibility of a program. Forming strategic planning teams and alliances via broad interdisciplinary collaborations can also contribute towards developing credibility and legitimacy for any diversity program. In addition, creating innovative minority recruitment models can vastly impact the success and perceptions of once ill-conceived diversity programs that once targeted only “token” academically stellar representatives of URM groups but with no real impact. Lastly, the most positive reflection of an effective diversity program is one that has as its very foundation, broad-based inclusion principles—regardless of race, creed, color, religion, ethnicity or economics.

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