

NextGen STEM Teacher Preparation Program's Diversity Working Group: A Tool for Working Groups to use when Creating an Inclusive Landscape Analysis.

2019

This tool is designed to help screen landscape analysis plans for subtle bias and understanding of targeted populations. Given the years of systemic racism in this country and the fact that many people have recently immigrated, it's important you consider equity vs. equality when developing an understanding of communities and people from diverse backgrounds you seek to join the STEM teaching workforce.

Many prospective students from diverse backgrounds face historical, economic, political, and sociocultural barriers that impact interest, access, completion and placement into STEM related professions, including STEM teaching. While this has been supported in educational research, this tool serves the purpose of developing an initial understanding of the way in which working groups have approached their Landscape Analyses in relation to these barriers.

This Analysis Tool is broken into four key sections to examine the depth of learning about diverse communities during your landscape analysis in ways that disrupts the culture dominant in K12 and post-secondary educational institutions.

1. Evidence of Multiple Voices
2. Evidence of Commitment to Diversity
3. Evidence of Structural & Systemic Analysis
4. Evidence of Targeted Focus

1.Evidence of Multiple Voices

	Yes	No	Unsure
<p>Diverse experiences and expertise</p> <p>1.1. Is your working group inclusive of the voices of minoritized groups underrepresented in STEM? a. If no, has your working group discussed how to include these voices throughout the landscape analysis?</p> <p>1.2. Is your working group utilizing research written about minoritized communities?</p> <p>1.3. Is your working group utilizing research written by scholars from minoritized communities?</p> <p>1.4. Does your working group have the experiential knowledge to speak to specific policies and structural barriers of diverse groups in relation to traditional pathways to higher education?</p>			
<p>Language</p> <p>1.5. Is the language used in your landscape analysis reflective of the way in which minoritized communities might articulate barriers to STEM?</p> <p>1.6. Is the language your working group utilizes accessible to a non-academic and practitioner audience?</p> <p>1.7. Does the language your working group utilizes imply deficit perspectives or understandings of barriers to STEM for minoritized groups?</p>			

Notes:

2. Evidence of Commitment to Diversity

	Yes	No	Unsure
2.1. Do you capture how the current study body reflects the communities and region(s) you serve? <ul style="list-style-type: none"> a. Institution b. School/Department c. Program d. Working Group Topical Focus 			
2.2. Do you examine recruitment and informational materials for representation of diverse populations? <ul style="list-style-type: none"> a. Institution b. School/Department c. Program d. Working Group Topical Focus 			
2.3. Do you capture how the current faculty/staff/leadership at at examined institutions reflects the communities and region(s) you serve? <ul style="list-style-type: none"> a. Institution b. School/Department c. Program d. Working Group Topical Focus 			
2.4. Do you capture the activities of your diverse alumni? <ul style="list-style-type: none"> a. Institution b. School/Department c. Program d. Working Group Topical Focus 			
2.5. Do you capture the ways in which the voice of diverse students and communities influence the various levels of your landscape? <ul style="list-style-type: none"> a. Institution b. School/Department c. Program d. Working Group Topical Focus 			

Notes:

3. Evidence of Structural and Systemic Barriers

	Yes	No	Unsure
<p>Pathways</p> <p>3.1. Is your landscape analysis inclusive of data sources that reflect the experiences of minoritized groups underrepresented in STEM?</p> <p>3.2. Does the landscape analysis identify or address the possibility of multiple paths to college readiness? a. If no, how can you determine current pathways and pathways as perceived by prospective students from targeted populations</p> <p>3.3. Are there multiple ways for prospective students to meet minimum experience requirements?</p> <p>3.4. What coursework or work experience is required to enter or complete key programs? a. Are there alternatives? (for example math for teachers vs. standard or engineering math coursework)</p> <p>3.5. Are there any minimum requirements that could easily be incorporated into program offering, job training, work experience, etc.?</p> <p>3.6. Are there examples of successful programs working with diverse populations in your landscape analysis, even if not STEM focused?</p> <p>3.7. Does your landscape analysis capture local knowledge</p> <p>3.8. Does your landscape capture pathways for varied profiles of students, if they vary by profile and/or program (working, full time, part time, job embedded)?</p>			
<p>Historical Barriers</p> <p>3.9. Does your landscape analysis include information on the historical trajectory of your respective institutions efforts and efficacy engaging in outreach in minoritized communities?</p> <p>3.10. Does your landscape analysis include documentation or information on current and previous community and corporate partnerships with your respective institution(s) focused on STEM or STEM education and minoritized communities?</p> <p>3.11. Does your landscape analysis include historical information, data, research, or reports on STEM programs focused on STEM access in minoritized communities from community organizations, advocacy organizations, nonprofits, professional organizations, philanthropical organizations, or schools/districts, etc.?</p>			

<p>Economic Barriers</p> <p>3.12. Does your landscape analysis data document the availability or lack of availability of economic resources that can assist minoritized students in funding a college degree in STEM education?</p> <p>3.13. Does your landscape analysis Include data that accounts for potential STEM opportunity gaps for minoritized students in Title I schools?</p> <p>3.14. Does your landscape analysis include data that indicates your respective institutions ability or lack of ability to commit resources to sustained, long-term efforts to enhance the representation of minoritized communities in STEM teaching?</p> <p>Political and Sociocultural Barriers</p> <p>3.15. Does your landscape analysis consider how policies, practices, and procedures in educational institutions might serve to help or hinder access to STEM teaching for minoritized students?</p> <p>3.16. Does your landscape analysis take into account the uncertainty felt in minoritized communities given the current political, economic, and social climate, and how that might influence perceived opportunities in STEM teaching?</p> <p>3.17. Does your landscape analysis reflect on the demographics of the faculty responsible for preparing STEM teachers from underrepresented communities?</p> <p>3.18. Does your landscape analysis examine how educator preparation programs, their curriculums', and prerequisite coursework apply culturally responsive, sustaining, and revitalizing approaches to teaching and learning in STEM?</p> <p>3.19. Does your landscape analysis include the identification of community leaders, community resources, or potential models that could be harnessed to enhance interest in STEM education in minoritized communities.</p> <p>3.20. Does your landscape analysis include information on resources available at the district and/or university level that could serve to support STEM teachers from minoritized communities throughout and beyond degree completion.</p>			
<p>OTHER</p> <p>3.21. Has your working group discussed the importance of connecting STEM to community advocacy?</p> <p>3.22. Does your landscape analysis identify and name specific barriers and challenges of those groups in relation to traditional pathways to higher education?</p>			

Notes:

4. Evidence of Targeted Focus

	Yes	No	Unsure
<p>4.1. Are minoritized students academic and non-academic activities captured?</p> <p>4.2. What social connections and academic structures exist in your institution that are engineered to support targeted underrepresented students (ie. Cohorts, peer study groups, guaranteed and transparent admissions)</p> <p>4.3. Is language fluency relative to home language(s) of families in your region examined?</p> <p>4.4. Do you do targeted recruitment tailored to specific minoritized populations?</p> <p>4.5. Are minoritized students completing programs successfully?</p> <p style="padding-left: 40px;">a. If so, do you know why from their perspective?</p> <p style="padding-left: 40px;">b. If not, do you know why from their perspective?</p> <p>4.6. Does your landscape analysis uncover or mention targeted supports provided to specific minoritized group (i.e. Minority Engineering Program, academic and social supports for minoritized students, varied admission requirements, Native Teacher Preparation programs, women in engineering)?</p> <p>4.7. Does your analysis examine place-based efforts to work with targeted populations?</p>			

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