Attract students to your program

<u>Potential Strategies</u>:

- Use displays, website, and/or recruitment flyers to advertise/promote your geoscience program on campus

- Work with school advisors/counselors/outreach office to familiarize them with your geoscience courses. Explain how the courses fit with Guided Pathways or other curricular requirements.

- Participate in career fairs at your institution

- Build a program that has a reputation of good teaching, strong courses, and that supports all students.

- Offer a range of courses and incorporate issues of local to national/global significance in your courses

- Work with your outreach office to highlight geoscience offerings. (e.g. when advising students on STEM course or career options)

- Build alliances with the local secondary education systems

- Develop courses that meet the needs of specific degrees or certificates (e.g. HVAC students needing environmental science, law-enforcement students needing forensic geology, emergency management students needing geo-hazards)

Support the academic success of all students through course and program design and assessment

Potential Strategies:

- Incorporate active learning pedagogies (e.g. think-pair-shares, clicker questions, jigsaws, gallery walks, course-based research projects, etc.)
- Build students' metacognitive skills (e.g. exam wrappers, minute papers, self-reflection exercises, journaling, knowledge surveys, etc.)
- Use data on students' interests in course design and revisions
- Use data on program effectiveness to inform program revisions
- Collect and analyze data on student participation and success across all courses. Analyzes disaggregated data on participation and student success for students from groups that are underrepresented in the geosciences
- Work with other relevant offices on campus to support student success

Broaden participation in the geosciences: supporting diversity, equity, inclusion, and foster a sense of belonging

Potential Strategies:

- Incorporate culturally relevant pedagogy and science content (e.g. place-based learning, teaching about environmental justice)

- Use examples of diverse geoscientists, including underrepresented minorities and women, incorporate into class assignments in all geoscience courses and program documents (Sarah L. Rodriguez, Kelly Cunningham & Alec Jordan (2016): What a Scientist Looks Like: How Community Colleges Can Utilize and Enhance Science Identity Development as a Means to Improve Success for Women of Color, Community College Journal of Research and Practice)

- Provide a written statement, displayed publically, that affirms that the department values diversity (e.g. community statement)

- Provide faculty with professional development on topics such as implicit bias and stereotype threat and their effects on students' cognition and sense of belonging.

- Coordinate efforts with campus offices for supporting diversity, equity, and inclusion (e.g. cultural centers, office of campus life/student affairs, diversity office, etc.)

- Provide mechanisms for student financial support (e.g. peer advisors, tutors, teaching assistants, scholarships, etc.)

- Build awareness of institution's policies and procedures for addressing incidents of sexual harassment and assault

- Create student geoscience organizations and clubs, open to all who are interested

Facilitate students' career pathways into the geosciences

Potential Strategies:

- Build students' awareness of career opportunities and pathways in geosciences beyond just the traditional geosciences (e.g. environmental studies, urban planning, business)
- Invite speakers to talk to students about geoscience careers
- Inform students about external internships and/or research opportunities
- Ask students about their goals (e.g. careers, degrees) during advising sessions
- Develop a handout/resources for campus career center &/or advising center that outlines career opportunities in geoscience and pathways to those careers
- Establish formal or informal partnerships/relationships with regional geoscience alumni, employers, and/or faculty at transfer institutions
- Incorporate course assignments that include a focus/ or spotlight on careers
- Develop a student chapter of a professional geoscience society
- Offer sessions on resume writing and/or job applications

Support students' transfer to four-year colleges and universities

Potential Strategies:

- In collaboration with local 4YCUs (four-year institutions), set up visits, tours, and/or joint field trips
- Develop a summer bridge program with local 4YCUs
- Help students select a potential transfer destination
- Provide students with detailed information about the admissions process, financial aid, cost of attendance, and course requirements for students' intended geoscience major and transfer destination (i.e. develop geoscience-specific transfer guides; provide tailored transfer advising)
- Create clear programmatic pathways with aligned high-quality instruction between the 2YC & 4YC partners
- Monitor students' progress along their transfer plan, intervening quickly when students are off-track
- Prepare students for success in upper-level STEM courses by identifying and developing necessary skills before students transfer
- Regularly review, update, and improve program maps (e.g. articulation agreements) between the 2YC and 4YCU geoscience programs
- Conduct a "program audit" to assure alignment between career/transfer-related skills and course assignments. Assure alignment between the 2YC program requirements and 4YCU articulation agreements, and/or geoscience degree requirements

Build a strong departmental / program environment and work effectively in the context of your institution

Potential Strategies:

- Facilitate faculty learning from each other through professional development opportunities
- Make joint curricular and programmatic decisions
- Mentor new permanent and adjunct faculty by providing both formal and informal programs
- Hold regular department / program meetings
- Engage and support adjunct faculty
- Provide geoscience social events for students as well as faculty (e.g. picnics, movie nights, etc.) that are designed for maximum accessibility, including some open to family members
- Set departmental/programmatic goals, collect data, and evaluate progress toward those goals
- Align program goals with institution's strategic plan and goals
- Develop good relationships with administration and other units on campus. (e.g. good working relationship with department chair, dean, division chair, etc.)