

GEOPATHS: Assessing Engagement of Students and Faculty at Community Colleges to Enhance Recruitment to 4-Year Geoscience Programs



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Background

20-30% of students majoring in Geology or Physical Geography at UT are transfer students, however there is little data on the success these transfer students experience compared with students who begin their college education at UT. In general, there is very little interaction between geoscience faculty at UT and at local community colleges.

In 2015, the state of Tennessee introduced free tuition to community college (CC) students through the "Tennessee Promise." This is already affecting 4-year public colleges in a few ways including:

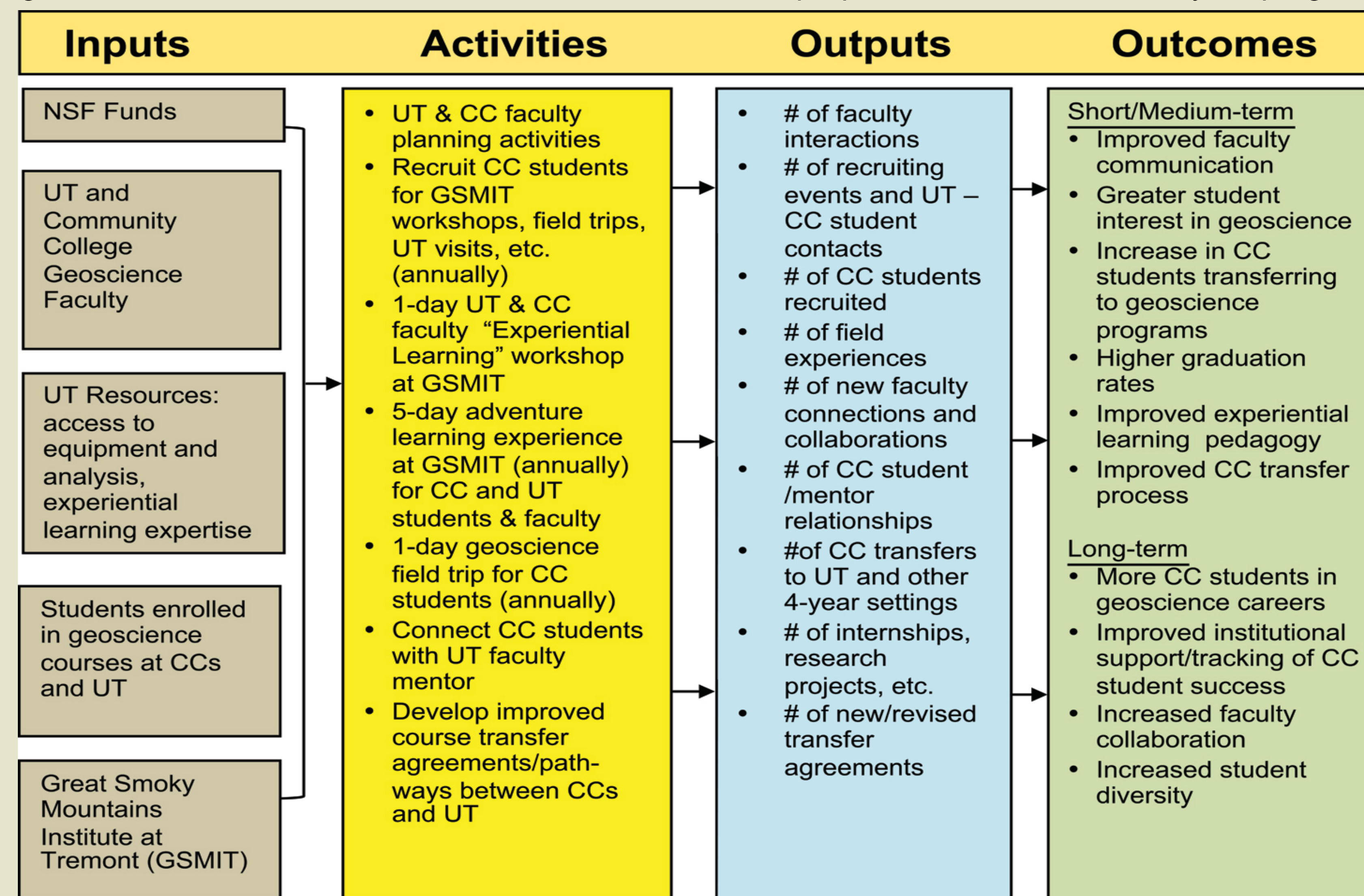
- Reduction in the "Hope" Lottery Scholarships received
- Increased enrollment in 2015 at all community colleges in Tennessee
- Reduction in 2015 freshman enrollment in all public 4-year colleges, except UT
- Expected increase in transfers to 4-year programs in 2017

The goals of GEOPATHS are to:

- Increase recruitment of CC students to 4-year universities
- Improve success of transfer students at 4-year universities
- Identify opportunities for institutional changes to make transfers to 4-year universities easier
- Evaluate to assess effectiveness of intervention towards achieving goals

Theory of Change & Logic Model

Personal, ongoing contact with UT faculty and students, along with exposure to diverse and exciting geoscience fields, will increase CC student interest and preparation for success in 4-year programs.



Evaluation Methods & Data Analysis

A mixed-methods approach to data collection is used to address the evaluation questions. This approach includes interviews with participating faculty, focus groups with recruited students as they finish their course of 2-year study at each partner community college campus, survey data measuring student satisfaction with individual program activities, a focus group with the first cohort of program participants who opt to enroll at UT and those near graduation, and program participant data.

UT SWORPS collaborates with the primary investigators and other key stakeholders at the UT Earth & Planetary Science and Geography departments on tool development and data collection. Collaboration on tool development also includes a telephone survey protocol that stakeholders can use after the end of the grant period to begin tracking student post-educational experiences.

UT SWORPS processes and analyzes all quantitative and qualitative data. Descriptive analyses is completed on all demographic and participant data, post program event surveys, and any other quantitative data. Focus group, interview, and other qualitative findings are coded and analyzed for key themes.

Evaluation Efforts & Questions

Evaluation efforts are contracted with a third party evaluator, the UT College of Social Work Office of Research and Public Service (UT SWORPS). Evaluation activities are guided by the program's logic model, span over the grant's 3-year period, and address both formative and summative evaluation issues. Evaluation plan and data collection strategies will be refined as needed throughout the grant in accordance with what is most useful to the program while also staying true to funder requirements. Evaluation activities seek to answer the following questions:

Formative Evaluation:

1. What strategies did the program use to recruit students in participating community colleges (CCs)? What recruitment methods were most successful and what were barriers to recruitment? How did recruitment methods for transfer students differ from those used for freshmen? Was there more demand for program participation than the program had resources to serve? If so, how did the program prioritize students?
2. What was the demographic profile of CC students participating in the program? How does the demographic profile of these students compare to the demographic profile of UT freshmen and sophomores enrolled in geology and physical geography programs?
3. Were program activities and outputs consistent with what was planned?
4. What strategies did the program use to break down some of the impediments to transferring to UT?
5. What did collaboration with CC faculty look like? How were partnerships developed and maintained?

Summative Evaluation:

1. How did the program affect short/medium term outcomes for CC students pursuing STEM careers? Were there any perceived program benefits for UT 4-year students?
2. How did the program affect long term outcomes for CC students pursuing STEM careers?
3. How did the program affect outcomes related to connections between participating CC and UT geoscience faculty?
4. How did the program affect outcomes related to improvement of recruitment/placement of transfer students from CCs to UT?



Interpretation & Dissemination

Interim reports will be prepared for primary investigators and other key stakeholders at the end of Year 1 and then again at the end of Year 2 to inform continuous program improvement. A final project report addressing program implementation, outputs and outcomes will be prepared at the end of Year 3. UT SWORPS will work with GEOPATHS' primary investigators to develop a plan to disseminate findings to the greater public and other interested parties, as it is appropriate.

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