

# Left foot, right foot: Progress and precarity in rural STEM education

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## ABSTRACT

In a time of increased political pressure on educational efforts which are deemed diversity, equity, and inclusion (DEI), it can be very easy to get discouraged. This essay uses an example of a rural STEM education grant which was identified on a DEI list as an example of how these challenges can create an opportunity for a renewed hope in the value of meaningful engagement with schools and communities.

## KEYWORDS

*Rural education, STEM education, Teacher Education*

Falling certainly in the category of emails that caught me off guard, in February 2025 I received a message from our university communications office that essentially asked, “Is this you?” with a link. The link connected to a database released by Ted Cruz’s office of “Woke DEI Grants” and buried on line 577 was the project for which I am a Co-PI “Science Teachers for Rural America.” Having a good relationship with our communication office, I was pleased at their efforts to reach out and to work on a plan should the university need to respond, but I was struck by seeing my project under labels such as “questionable” and “neo-Marxist class warfare propaganda.”

When the attacks on DEI began, I assumed this project was rather safe and as of writing it seems that it still is. The project focused on providing stipends to recruit and retain individuals with STEM degrees to become teachers in rural communities, particularly in Western Kansas. Most of the communities with which we were working were remote farm towns and, in many ways, serve as the picture of the “real America” which seems to be the goal in contrast to DEI. In fact, when we received the grant, Republican Senator Jerry Moran came to campus to announce it and congratulate us. Although progress on the grant project itself had been slow with a number of setbacks, up to that moment it felt like the progress was safe.

The lack of uncertainty in progress made was by far the most unsettling aspect. This came at the time that we had just found our stride in recruiting individuals. In fact, it looked like there was the potential that 2024-25 would see twice as many students recruited as the two prior years combined. Again, as of the time of writing, we are still able to support these students.

As the headlines broke, potential students would reach out with questions of “Do you still have funds?” and “Are you still able to award stipends?” I wanted to give them an emphatic “yes!” I wanted to tell them that we had worked hard and that if they were willing to consider a career as a teacher, we could give them the best possible financial opportunity to start that career. I wanted to tell them how desperately our rural communities need STEM teachers and how wonderful the students can be in those schools. I really wanted to say, “If you are willing to step out into the unknown, to be brave, and to consider becoming a teacher, we will have your back.” However, the answer I had to give always started with “As of now...”

One of the things that makes me most proud to work at a regional comprehensive university is the work we do for the schools and communities in our region. Although a problem certainly found elsewhere, the challenge of finding and retaining high-quality

teachers can seem almost impossibly difficult. Many schools resort to unlicensed teachers, unqualified teachers, or moving classes online. As a result, in many more cases than would be desirable, where a child lives determines whether they have the opportunity to have meaningful, educational experiences in STEM.

Currently, the project finds itself in an odd state of tension. In some ways, it feels as if I put on blinders and kept my head down; not much has changed in my day-to-day from a year ago. On the other hand, there is a prevailing feeling that the rug could be pulled out from under them at any moment. These places of tension, however, are incredible spaces of learning, and I feel like there have been growth opportunities through this experience.

First, the last few months have taught me the importance of a sense of urgency. As uncertainty grew from the outside, it became even more pressing to recruit future teachers and award stipends. In short, we have pushed to get the money out the door while we know we still have it. Not that we were lax in our efforts before, but the vulnerable communities we work with had already been living in uncertainty long before I received the fateful email and felt my own increased sense of urgency.

Second, when progress gained is not guaranteed to be maintained, I have learned the importance of relentless forward progress. As a white male, I have spent most of my life being generally guaranteed of the progress I have made. I have intellectually known that this is not the experience for many in marginalized communities, but this experience greatly reinforced the need to avoid complacency. From my background in endurance sports, I think about the idea of “left foot, right foot-ing,” which means that when someone feels miserable, sore, and/or sick in a long run, they just need to keep taking steps forward. In such a time of uncertainty, it has become incredibly clear to me the need for us to “left foot, right foot” in our work to serve teachers, schools, and communities.

There is one final lesson I have learned through this experience. Those who resist this work (perhaps without fully understanding what it is) believe it can make a difference. As we toil, if there is no chance those efforts will make meaningful changes to the actual lived experiences of teachers and students, there is no real need to oppose them. Although many of these attacks are under the banner of reducing wasteful spending, the reality is that most of these projects represent such a minimal amount of funds that it is hard to believe that is the actual motive. In fact, the entire database, although totaling \$2 billion, represents less than 0.03% of the annual US budget.

Furthermore, most of the identified projects are multi-year, which further lowers the percentage. By way of analogy, these percentages would be equivalent to the parents in a median-income US family using budget efficiency as the reason they will not spend \$25 to take their kids to see the new Paw Patrol movie.

Although long-term optimism certainly does not come easily right now, I do think the difference our work can make can provide a spark of hope and encouragement. Tension is unlikely to ease and realistically there are likely to be many days ahead where the potential for things to come to a crashing halt feels high. However, I think the course of action to help support the needs of teachers, students, and schools is rather apparent. We are definitely in a time where we must left foot, right foot.