

## Creating a Sense of Belonging at a Tribal College

Native American students are one of the least represented populations in the American higher education system. The representation of these students is so low that oftentimes Indigenous students are hidden amongst the “other” category in demographics. The Postsecondary National Policy Institute fact sheet notes that American Indian or Alaskan Native students make up only one percent of the U.S. undergraduate population and less than one percent of the graduate population (PNPI, 2019). We also know that Native American students have low persistence rates as compared to the general population (Tachine, Cabrera and Yellow Bird, 2017).

Creating a sense of belonging has a great impact on persistence, retention, and student success. Tribal Colleges and Universities (TCUs) have committed their curricula to providing educations that include cultural components and academic coursework. This combination of education nurtures an atmosphere where students’ cultural practices coexist, rather than conflict, with education. Bringing Native American history, culture, and language into the educational framework at TCUs assists students in building a sense of self, which is an essential component of belonging within educational institutions (Tachine et al., 2017).

### Bleak Academic Outlook

Many community college students across the United States are unable to graduate because they have been unsuccessful in completing a college-level math class. The Saginaw Chippewa Tribal College (SCTC) math faculty had concerns about the pass/fail rate of students in Introduction to Statistics. Like many other instructors, SCTC’s academic specialist in math knew that students were filled with math anxiety. Thoughts of “I am not a math person” had been imbedded by past experiences. He also knew that for some of his students, this mentality was intensified by the low expectations that they, as Native American students, had encountered and internalized most of their lives.

The academic specialist in math at SCTC came to realize that something needed to change. His students were not faring well in their math courses and many of them would put off the college-level classes until the very end of their degree and then stop attending, making it even more difficult for SCTC to help them reach the finish line.

### A Change in Curriculum

SCTC was offered the opportunity to participate in the WestEd Carnegie Math Pathways Program. WestEd describes the Carnegie Math Pathways as re-conceptualizing what students learn in math and how they learn it. It is two research-based courses, Statway and Quantway, collectively referred to as the Pathways. The Pathways are noted as being meaningful and relevant to students’ lives and careers when compared to traditional developmental math. The Pathways are accelerated and rigorous college-credit courses (WestEd, 2020).

This holistic approach to developmental mathematics has helped turn around students’ belief that they are “not a math person.” The Pathways allow students to collaborate with each other in groups and work through course material together. As opposed to a traditional lecture style, instructors are found walking from table to table and asking open-ended questions as facilitators in order to prompt discussion and comprehension. The Pathways also help create a community of learners among students who feel they do not belong in math class, or even college. These social-emotional factors matter more than experts realized, reports Carnegie Math Pathways executive director Karon Klipple (2020). Research indicates that after basic math knowledge, a student’s sense of capability and belonging are the biggest predictors of success or failure. (WestEd, 2020).

### Cultural Contract Creation

After having received the Pathways training, the SCTC math instructors implemented Quantway and Statway at SCTC in the spring of 2018. The academic specialist in math took full advantage of the Pathways’ adaptability. He worked with students in the classroom to turn the Pathways student contract into a cultural contract using the Anishinaabek Seven Grandfather Teachings. These teaching are deeply rooted in Anishinaabe culture. In no particular order, the Seven Grandfathers include: Nibwaakaawin (Wisdom), Zaagi’idiwin (Love), Minaadendamowin (Respect), Aakode’ewin (Bravery), Gwayakwaadiziwin (Honesty), Dabaadendiziwin (Humility), and Debwewin (Truth). The Seven Grandfathers are principles for living a good life and having greater success within the tribe.

Like the pedagogy of the Carnegie Math Pathways, the intent of creating the contract was to produce a sense of

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community and give students power in the classroom. The academic specialist wanted his students to know from the first day of the term that this class was different from past developmental math classes they had taken where they may have experienced classroom trauma. One way this difference was enacted was by setting tables up in an “island” formation to allow for group work, and not in rows like the conventional classroom.

Over the course of the first week, the instructor and students had conversations about growth mindset, feelings, and attitudes. During these conversations, students discussed the Seven Grandfather Teachings; made wall posters reflecting specific, observable behaviors and attitudes that honor each teaching; and provided daily reminders and motivators to stay connected. These activities helped create an interactive classroom dynamic.

After creating the cultural contract, one student still had difficulties during class. This student was unprepared for an upcoming quiz, so he decided not to come to class. He felt that he could not face his group members and was afraid he would let them down since he could not contribute. This is when the contract came into play in another way. Some of his classmates read to him the bravery poster, noting his signature at the bottom. They reminded him that the brave thing to do would be to come to class even if he was not prepared and that they would all learn together. The students created a sense of belonging and community amongst themselves through their cultural activities.

### We Do Belong

Since the Pathways have been incorporated into curricula at SCTC, students have had significantly higher pass rates than in previous years. In written reflections, many students wrote about how important the contract had become to them and what it meant to have a part of their culture brought into the classroom. They noted that having the contract helped them to feel less alone and more likely to assist others and to ask for help themselves. Others discussed the fact that the contract had offered them a sense of ownership in the class. Not only did they want to succeed, they also wanted their group members to succeed as well. Almost all noted they felt like they belonged.

One student told the SCTC academic specialist about her anxiety surrounding a mathematical concept she had learned while in public high school. When she told her high school teacher she did not understand the concept, the teacher told her that she did not need to understand the concept since she was a tribal member and received per-capita checks. This experience could not be further from what students report at SCTC. The Pathways have provided a new process for working through math concepts that relieves students of math anxiety.

### Conclusion

Empowerment, acceptance, and belonging are not something that Native American students often feel in the classroom. Creating a sense of belonging for students has a great impact on persistence, retention, and student success. Incorporating cultural components in the classroom creates a welcoming, community feel. This is something that many Native American students have been longing for. Seeing students become empowered by their own learning has been a great reward for the math faculty at SCTC as well.

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