

Dr Arthur Jorgensen Chair Award 2007: Tom Janzen

Every year, MCATA presents an award to a student in a degree program at a faculty of education in Alberta who has demonstrated academic excellence and a clear commitment to mathematics education. The recipient of the Dr Arthur Jorgensen Chair Award for 2007 is Tom Janzen.

It has been my great pleasure to meet Tom and I've been impressed by his commitment and desire to provide excellence in mathematics education. As an introduction into the community of mathematics teachers in Alberta, I present his thoughts on his background, preparation and goals for teaching mathematics.

—Editor

In school I was a strong mathematics student, and math was always my favourite subject. Following my high school graduation I was offered a job at my high school as a math assistant, which led to a job as an educational assistant at the local outreach school as their math specialist. This is what led me down the path towards pursuing mathematics education as my area of study and career. I have thoroughly enjoyed the opportunities I have had to work with students and share some of my love of the subject with them. I am excited by the challenges I face as a math educator and am discovering new ways to address them. At the outreach school I quickly discovered that many students had huge deficits in mathematics, which



Tom Janzen (left) receives the Dr Arthur Jorgensen Chair Award from Dr Jorgensen.

created a passion in me to find ways to open the doors to mathematics for students who have shut it out or been shut out.

I believe that mathematics education needs to be made visible and accessible to everyone in the school. This could take the form of math contests, fairs or family evenings, displays on school bulletin boards, or a math club. These are all opportunities I would like to be a part of if they already exist or initiate if they do not. I think it is very important that mathematics go beyond the math classroom. I think it would be very exciting and tremendously beneficial to work with colleagues in other departments to set up cross-curricular activities that would not only incorporate math into other subjects and the whole school community but also allow for more diverse activities in the math classroom. Networking with other schools could unite the school community. Partnering with local schools or doing something online with schools further away, even internationally, could get students very excited about math. Mathematics education needs to be seen as more than a necessary evil, and these are just a few ways that I believe that that can be achieved.

With respect to students, I believe that one of the biggest challenges continues to be a negative attitude towards mathematics. I think this is a societal issue that needs to be combatted at that level. It is very detrimental to have a socially acceptable distaste for mathematics. This can lead to students having preconceived notions of both the content and difficulty of the subject. I think that that is why many students give up on the subject before they even give it a chance. I also believe that this is one of the causes of the numerical literacy concerns in mathematics today.

While working at the outreach school, I experienced the deficits in this area first-hand with junior high and high school students. For whatever reason, some students had been promoted from level to level without gaining the necessary skills to move forward. This sets them up for frustration and failure and contributes to negative attitudes towards math. I believe that numerical literacy is an issue that needs to be addressed at all levels of mathematics education, because it is such a key component of students' education and preparation for today's world. Another issue in mathematics education is the disconnect between math and the social-development nature of education. I do not believe that mathematics needs to be separated from the school's goal of preparing students to be contributing citizens to society. This is where projects like my work on developing global awareness and citizenship in the math classroom can be very beneficial. There are many opportunities to incorporate these different issues, and I do not believe that enough math teachers are taking advantage of them.

I feel that to foster positive attitudes I need to lead by example. As both a teacher and a person, I need to maintain my positive attitude toward the subject. Fostering a positive attitude also needs to be a priority for everyone, including colleagues and the students' families; everybody needs to be on board. In the classroom, I think giving students something different and unexpected could excite them and allow them to see math in a new light. Diversifying instruction and assessment strategies and incorporating ideas and issues from outside of the curriculum could help achieve this goal. I think this could make math class something fun and interesting that students would look forward to.