Together with two UWEC undergraduate researchers I am investigating the teaching practices used in the training speech therapists to work with people who stutter. Disability simulation is frequently used to help students develop empathy towards people who stutter. However, disability simulation frequently has the opposite effect. We will present a mixed methods study indicating that students who undergo a disability simulation assignment report meaningful changes in their attitudes towards stuttering, but this change does not bear out in a comparison of their opinions of stuttering. This suggests that disability simulation alone is not sufficient to support the development of empathy and students would benefit from more holistic approaches to help them change their attitudes about stuttering.