Developing a Teacher Identity

Understanding the Teacher Identity Development of an Undergraduate Data Science Practitioner Turned Educator

How to teach data science effectively is still largely unknown, as is the experience of educators in this field. Many data science instructors transition from practitioner roles, and understanding their experience during this transition may inform us of ways to support these individuals. To study this, I transitioned from data science practitioner to educator and tracked the experience with journal entries. The study found that I encountered many challenges, mainly surrounding issues of teaching in a higher education context, caring about others opinions, and difficulty distinguishing identity between peer, TA, or instructor.

Studying teacher identity

Teacher identity development can be described as “an ongoing process of interpretation and re-interpretation of who one considers oneself to be and who one would like to become,” (Beijaard et al., 2004).

Understanding this development can help us better prepare those who are purposefully developing their identity.

Change is found in teacher identity development based on discipline. Because of this, understanding the teacher identity development of data scientists is relevant to help prepare individuals for this journey.

I conducted a study via creating and analyzing qualitative journal articles during my transition from data science practitioner to educator.

I journaled five to six times per week, creating a total of approximately 50 pages of notes on what I considered to be impactful experiences during my teacher identity development.

Challenges in developing identity

While teaching OCEAN 240 and OCEAN 340, I faced a number of challenges. These can be summarized as:

1. Issues teaching in a higher education context
2. Caring greatly about the opinions of others
3. Difficulty distinguishing identity between peer, TA, or instructor

Challenges discovered vary in alignment with prior work (van Lankveld et al., 2017). Findings suggest that data science educators encounter similar challenges as other higher education educators (1b, 2b). However, undergraduates acting as instructors may create unique challenges, impacting teacher identity development (1a, 2a, 3).

References:
