The Impact of Professional Goals on Students’ Educational Experiences: A Longitudinal Case Study from Engineering

RESEARCH QUESTIONS

How can Tinto’s model illuminate paths to persistence at Mountain Tech? How do students’ intrinsic and extrinsic motivational factors intersect Tinto’s model?

FRAMEWORK

Extrinsic Motivation (Get an Engineering Degree): engineering as a basis for other careers or means to financial rewards

Intrinsic Motivation (Be an Engineer): express sincere interest in what they perceive engineers as doing

Extrinsic Motivation

Intrinsic Motivation

PRELIMINARY FINDINGS

Tinto framework highlights paths to persistence for MT students.

Longitudinal evaluation shows student experiences reinforce initial commitment goals.

Intrinsic interest had more positive academic experience.

Initial Commitment to Major

“T’m in petroleum engineering partially because of the monetary rewards, I think it’ll get me-, and I think it’s interesting obviously…."

Reinforced Commitment to Major

When asked about experiences that reaffirmed his commitment to engineering he answers, “Just work every single day. I love it.”

Extrinsic Motivation

“I think some of the things that are kind of pointless. Up until my rock properties labs I’ve taken have been one hundred percent pointless. Zero effective. Our physics lab was supposed to be to learn how to tinker with equipment and get it to work or something and all we learned was how to B.S. a lab and get it done….I don’t think the labs are effective at all. Right up until now. Because now I’m working on labs that I will be working on in my professional life.”

Intrinsic Motivation

“And then I think for the most part my classes have been enjoyable. I can definitely think of classes I hate and I can think of semesters that were just horrible and I thought I’m transferring out to another school because there was just so much work. But looking back on it, I don’t think, I wouldn’t have changed it for the world.”

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