

IRB number: 21-E-292

Introduction

Student empowerment is primarily concerned with mathematical empowerment and social empowerment (Ernest, 2002). Social empowerment is concerned with student ability in personal and professional, socio-political, and citizenship responsibility taking (Foley & Wachira, 2021). In this regard, this presentation will showcase an ongoing study on the undergraduate Quantitative Reasoning (MATH 1060) Course at Ohio University. The study involves in-depth semi-structured interviews with students and instructors of QR courses at Ohio University.

Research Questions

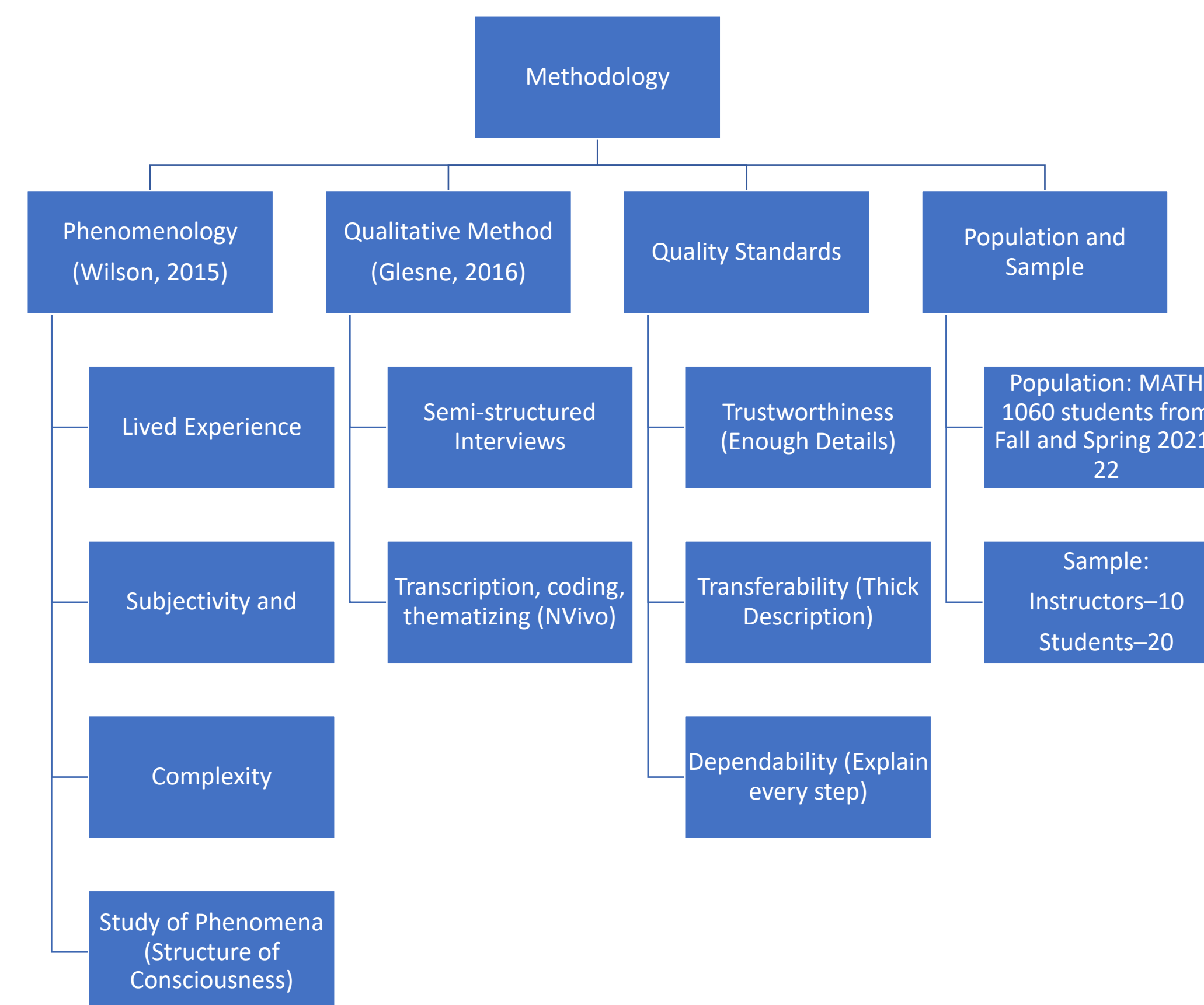
Research Purpose: To explore the student and instructor perspectives on the role of the MATH 1060 course, a Quantitative Reasoning course at Ohio University, in student empowerment.

1: Whether or how MATH 1060, Quantitative Reasoning course empowers students in mathematics?

2: Whether or how MATH 1060, Quantitative Reasoning course empowers students in socio-political awareness and engagement?

3: What are student and instructor recommendations for student empowerment?

Methodology



Preliminary Findings

- (RQ1) Limited scope of new mathematical content
- (RQ1) Making sense of quantitative information to understand the real-world situations
- (RQ2) Empowers students with experience of dealing with day to day problems such as personal finance
- (RQ2) Probability and statistical experience enhances critical thinking and helps understand local and global issues such as population, COVID, and environment
- (RQ2) Collaboration and communication skills enhancing social skills
- (RQ3) Instructors recommend smaller class size, professional development, and time for planning
- (RQ3) Students recommend inclusion of content more closely related to their career and personal life

Implications

QR instructors at OU and similar other universities/colleges on pedagogical practices

QR policymakers, curriculum designers, authors of books, and prospective students of QR

References

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