

Using Q Methodology to Better Understand Student Experiences

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Introduction

The Council for the Accreditation of Educator Preparation (CAEP) is the major accrediting body that reviews, assesses, and accredits teacher preparation programs in the US. The standards are rigorously utilized by universities as they establish goals to meet high standards in seven areas of achievement for the student, their program curricula, resources, and university support. There are four standards related to content knowledge (which incorporates learner-centered teaching), student achievement, opportunity, and satisfaction (CAEP, 2015). Often, state colleges and universities have difficulties with the standards related to students with diverse backgrounds and culturally responsive teaching; therefore, a particular emphasis on this standard is needed.

Methodology

Utilizing learner-centered teaching concepts, this study used Q methodology and student opinions related to the standards to develop the concourse of potential student reactions. It was sampled in the four areas of: Content and Pedagogical Knowledge, Clinical Partnerships and Practice, Candidate Recruitment, Progression, and Support, and Program Impact.

Q methodology is a particular type of factor analysis that is often used in social research. Q method allows researchers to extract a typology of perspectives from the participants. Data were collected using a 41-item Q set with students currently enrolled in a teacher preparation program at an Historically Black College and University (HBCU). Q method allows for a holistic approach to each viewpoint (Watts, & Stenner, 2012). By design, this method captures the subjective perspective of each participant. Because each person views the Q set through their own experiences and their own “self-reference,” each sort will inherently define their individual viewpoint. Through analysis of each individual emerges the group factor to be analyzed holistically (Watts, & Stenner, 2012). The process of analysis gave the team a typology from which we can determine possible courses of action. In contrast to Likert scale surveys, Q methodology used a forced distribution for each sort, requiring participants to decide which items are most like, or most unlike their own experiences.

For this study, survey items were created using the CAEP Accreditation standards 1 through 4. Although there are 7 accreditation standards, only the first 4 were used because those standards are specific to the student experience. The other 3 standards focus on administrative aspects of the teacher preparation program, and therefore may not be known by the students. Statements were derived from the standards, and then rephrased to be self-referent. The resulting statements were then reviewed for ease of understanding, redundancies, and clarity. The result was a Q-set of 41 self-referent statements.

Procedure

Once IRB approval was received, data collection was allowed to begin. Seventeen students participated in the learner-centered Q interview process of sorting and completing a demographic survey. Data were analyzed holistically using iterative analysis techniques (Albright et. al., 2019). The current data demonstrated a three-factor solution: Factor “On Your Mark” students

showed great satisfaction with the program and enthusiasm to learn more in the future; yet, a hesitation for readiness to teach. Factor “Get Set” students established a strong value for meeting the diverse needs of students in terms of ability, culture, and background. Factor “Go” students had less enthusiasm for the current program and feel ready to be teaching.

Results and Findings

Based on analysis of the factor arrays and supporting data from the demographic surveys, it is clear that students across the program feel supported by their instructors and their cooperating teachers. Because this study included individuals who were at the beginning of their teacher education program as well as students who had recently graduated, there is evidence of pre-service teacher growth in the resulting factors. The “On Your Mark” student perspectives indicate an excitement for their chosen profession, but a feeling of still being unprepared to be in the classroom. The “Get Set” student perspectives indicate that they felt called to be teachers. They feel that their portfolios are not yet strong, but they believe they are prepared to work with students in the classroom, particularly with diverse needs. The “Go” student perspectives indicate that they were ready to be teachers. They felt supported by the program and were ready to be in classrooms. Across the board, students felt some level of discomfort with the teacher preparation exams that they would need to take, and the department has discussed some ways that the results from this study may be addressed. It is encouraging to the department that students feel they have a lot of support from their instructors. The diversity viewpoint needs further research for HBCUs and other teacher preparation programs. This study demonstrates the value of Q methodology in program evaluation and feedback to university administrators and program faculty. Attention can be drawn to exam preparation when content is covered as students prepare to demonstrating their knowledge. Adjustments toward specific areas of the exams have been discussed by the EPP committee and will be ongoing.

Implication and Advice

Using Q Methodology allowed team to see three different reactions to the educator preparation program. We observed a trend of growth and development as students’ progress through the program. Q methodology allows the team to observe and determine where students might be in their developmental process. Students lacked confidence with certification teacher exams; but during field experiences, students displayed confidence in teaching diverse students utilizing learner-centered concepts. Future actions will include: (1) additional recognition of developmental levels of teacher education students, (2) using Q method to better identify student strengths and needs, and (3) utilizing learner-centered strategies and self-efficacy for students as they prepare for certification exams.

References

- Albright, E. A., Christofferson, K., McCabe, A., & Montgomery, D. (2019). Lessons learned: Some guidelines to factor interpretation. *Operant Subjectivity: The International Journal of Q Methodology*, *41*, 1–13. <https://doi.org/10.15133/j.os.2019.001> .
- Banasick, S. (2023). Ken-Q Analysis (Version 2.0.1) [Computer software]. <https://doi.org/10.5281/zenodo.8310377>
- Council for the Accreditation of Educator Preparation. (2015). CAEP accreditation manual. Washington, DC: CAEP.
- Stenner, P., Watts, S., & Worrell, M. (2008). Q methodology. *The SAGE handbook of qualitative research in psychology*, 215-239..