This paper presents a detailed methodological account of how the authors designed and executed a rigorous, four-stage, sequential mixed methods strategy to select eight high school sites for a large, longitudinal, multisite case study. The study's goal is to evaluate the implementation and impact of a statewide education policy (South Carolina's EEDA) on Programs of Study (POS) and student outcomes. The authors argue that while mixed methods are often used for data collection and analysis in such studies, their application to the critical stage of site selection is underreported. This paper aims to fill that gap by providing a transparent, replicable model for other researchers.

1. The Problem and Research Gap

The Gap: The authors identify a significant void in the literature. While mixed methods research is well-established, and its importance in sampling is acknowledged (e.g., by Collins, Onwuegbuzie, & Jiao, 2007), there are very few practical, detailed guides on how to actually use mixed methods to select sites for complex, multisite case studies.

Their Contribution: Their study is presented as a response to this gap. They aim to provide a clear, step-by-step description of their site selection process to serve as a guide for other researchers, thereby increasing the rigor and intentionality of sampling in mixed methods studies.

2. The Overarching Study Context

The site selection is for a 5-year, quasi-experimental, longitudinal study funded by the National Research Center for Career and Technical Education (NRCCTE). The policy under investigation is the South Carolina Education and Economic Development Act (EEDA) of 2005, which mandates the creation of career-focused "Programs of Study" (POS) in high schools. The study's main research questions are:

Can a statewide mandate like EEDA increase the number and participation level in POS?

How do the number and participation level in POS, combined with political, economic, and social characteristics, influence student and school outcomes?

3. Philosophical Foundation: Pragmatism

The entire research design, including the site selection strategy, is grounded in the philosophy of pragmatism. The authors justify this choice thoroughly:

Beyond Paradigm Wars: Pragmatism acts as a "bridge" between conflicting paradigms (e.g., post-positivism and constructivism), allowing the researchers to use whatever methods best answer the research questions without being constrained by philosophical purism.

Key Principles that Guided Them:

Eclecticism and Pluralism: Using different, even conflicting, theories and data sources is useful.

Action over Philosophizing: The focus is on what works to solve the practical problem of site selection.

Practical Theory (Praxis): Theory must inform effective practice. Their methodological theory directly informed their practical site selection steps.

Constructed and Experiential Knowledge: Knowledge is both based in reality and interpreted through human experience.

How Pragmatism Manifested:

Utility: The research must produce "actionable knowledge" useful for policymakers and practitioners.

Contextuality: It was vital to capture both the broad context and nuanced differences between sites that shape policy implementation.

Generalizability: They sought a form of generalizability that is transferable to theoretical populations and other settings, not just statistical generalization.

Interdisciplinary Team: The research team included statisticians, economists, sociologists, and educational researchers, embodying the pragmatic value of multiple perspectives.

4. The Four-Stage Sequential Mixed Methods Site Selection Strategy

This is the core methodological contribution of the paper. The process was sequential, meaning the results of each stage informed the next.

Guiding Strategy: MaxMinCon Principle (Kerlinger, 1986): To Maximize differences on variables of interest (e.g., policy implementation level, economic context), Minimize differences on confounding variables (e.g., student demographics), and Control for extraneous variables.

Stage 1: Representing Regional and Industrial Diversity (Quantitative)

Goal: Control for broad economic and industry conditions that could influence POS development (e.g., availability of local business partners).

Method: South Carolina is divided into 12 Workforce Investment Areas (WIAs), each with a distinct industry mix. Using employment data, a Chi-square analysis identified four WIAs where employment in the state's top five industries was significantly concentrated.

Result: The sampling frame was narrowed from ~150 high schools to 59 schools within these four economically distinct WIAs.

Stage 2: Selecting School Clusters Based on Economic Resources (Quantitative)

Goal: Further control for local economic conditions at the school level, a known factor influencing reform implementation.

Method: A hierarchical cluster analysis was performed on the 59 schools within each WIA using four local economic measures (e.g., per capita income, school poverty index, unemployment rate).

Result: Schools within each WIA were clustered into "high-poverty" and "low-to-moderate poverty" groups. Four clusters (one high-poverty and one low-poverty from two different WIAs) were selected, narrowing the pool to 33 schools.

Stage 3: Ranking Schools on Policy Implementation (Mixed Methods)

Goal: To rank schools based on their actual level of EEDA implementation to ensure variation (high and low implementers) in the final sample.

Method: The team created a Preliminary Site Selection Level of Implementation (PSLOI) score for each school based on six key policy facets (e.g., curriculum integration, counselor roles). This score was derived from:

Quantitative Data: State department of education surveys and questionnaires.

Qualitative Data: A systematic content analysis of school and district websites (e.g., analyzing course catalogs, career materials) using a constant comparative method.

Result: Schools were rank-ordered within their clusters by PSLOI score. The goal was to invite two high-implementation and two low-implementation schools from each of the four clusters (16 total). Due to non-response and refusals, substitute schools were identified, resulting in 10 schools moving to the final stage.

Stage 4: Validating Implementation Levels (Qualitative)

Goal: To validate the PSLOI scores through on-the-ground observation and investigation, ensuring they reflected reality.

Method: Researchers conducted site visits to the schools, involving:

Interviews with administrators and counselors.

Focus groups with teachers.

Result: The qualitative data gathered was used to revise the PSLOI scores into final Site Selection Level of Implementation (SLOI) scores. Based on these validated scores and the school's willingness to participate, the final eight schools were selected. These schools varied maximally on policy implementation and economic context while being somewhat comparable on student demographics.

5. Significance and Conclusions

Rigor in Sampling: The paper emphasizes that rigorous, theoretically-grounded site selection is crucial for the validity of a multisite case study's findings. It moves beyond convenience sampling.

Corroboration: The mixed methods approach allowed for data triangulation during site selection (e.g., comparing survey data with website content and interview responses), increasing confidence in the final choices.

Model for Others: The authors successfully provide a transparent, replicable model for other researchers conducting complex policy implementation studies in education or other fields. They demonstrate how to intentionally use mixed methods not just for answering research questions, but for designing the study itself.

Foundation for Analysis: This rigorous selection process ensures the final sample has built-in variation on key variables, allowing the researchers to make meaningful comparisons (e.g., How does policy implementation differ between high-poverty and low-poverty schools?) in the main phase of their study.

In conclusion, this paper is a sophisticated methodological guide that effectively argues for and demonstrates the power of using a pragmatic, sequential mixed methods approach to solve the complex practical problem of selecting representative and informative sites for a large-scale policy evaluation.