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**EDLD 5315**  
**Action Research Design Outline**

**What is the topic of your action research?**

My action research will focus on how the blended learning station rotation model impacts student achievement in 5th-grade mathematics.

**What is the purpose of your study?**

The research aims to investigate how implementing the station rotation model in a blended learning classroom affects 5th-grade students' academic achievement. The research aims to examine the impact of the station rotation model on students' performance on standardized math assessments in 5th-grade classrooms. I would also want to explore the influence of the station rotation model on students' math fluency, problem-solving skills, and other math domains. I would also like to know how the station rotation model can increase student engagement and enhance collaborative learning.

**What is your fundamental research question?**

In what ways does the implementation of the blended learning station rotation model impact students' achievement in 5th-grade mathematics?

**What is your research design? Qualitative, quantitative both (mixed-methods) Why?**

My research design will use mixed methods, meaning I will use qualitative and quantitative data to address the research question comprehensively. According to Mertler (2022), Quantitative data provides validity and reliability, and Qualitative data collection provides accurate, credible, and dependable data. Quantitative data will provide numerical evidence of changes in student achievement and growth. In contrast, Qualitative data will provide me with insights, experience, and testimonies on how the station rotation model influences student learning experience, engagement, and progress.

**What is the most appropriate type of data to collect?**

Quantitative data: Math achievement scores from standardized testing, benchmark scores, and state test scores are most appropriate to use.

Qualitative data: Classroom observation, walkthroughs, student surveys, and student and teacher reflections are the most appropriate tools.

**What types of measurement instruments will you use?**

Quantitative data: I will use MAP scores (pre-, mid-, and post-), which gauge students' growth and achievement. I will also use standardized tests and interim assessments given by the district.

Qualitative data: I will use surveys from teachers and students, reflection prompts, and observation data from walkthroughs.

**What is the focus of your literature review?**

The Literature review will focus on the definition of blended learning and, specifically, on the station rotation model in an elementary classroom. It will include the theoretical foundations of blended station rotation models and how they relate to mathematics learning achievement. It will also include the factors influencing the station rotation model for math instruction and implementation. The literature review will also include some challenges and barriers teachers may face when implementing station rotation models in math instructions based on existing research.

### **References:**

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