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EDLD 5315

Outline Assignment

I. What is the topic of your action research?

The topic of this action research is the implementation of structured digital routines during daily technology center rotations within kindergarten mathematics small groups. The study focuses on how *Tech Time: My Time in Kindergarten* supports student independence and engagement when technology is used consistently in a Title I classroom with limited devices and optional at-home QR code reinforcement.

II. What is the purpose of your study?

The purpose of this study is to examine how structured digital routines embedded in daily technology center rotations influence kindergarten students' independence during mathematics small-group instruction. This study also seeks to understand how a structured rotation model, using shared devices and optional at-home QR code supports, helps meet district technology usage requirements while promoting equitable access and effective use of instructional time in a Title I classroom.

III. What is your research question?

How does the use of structured digital routines during daily technology center rotations affect kindergarten students' independence during mathematics small-group instruction when optional at-home QR code supports are available in a Title I classroom?

IV. What is your research design (Qualitative, Quantitative, or Mixed Methods)?

Mixed Methods

a. Why did you choose this design?

A mixed-methods research design was chosen to capture both measurable instructional outcomes and contextual classroom experiences. Quantitative data will be used to examine student time on task, frequency of interruptions, and weekly i-Ready usage data required by the district. Qualitative data, including teacher observations and reflections, will provide insight into how students interact with structured digital routines within daily small-group mathematics rotations in a classroom with shared devices.

V. What data will you collect?

The data collected for this action research study will include:

- Weekly i-Ready usage data to monitor the district-required minimum of 45 minutes per student

- Time-on-task data during daily technology center rotations (two 15-minute rotations per day)

- Frequency of student interruptions or requests for assistance during technology center time

- Teacher observation notes documenting levels of student independence

- Teacher reflection journals describing implementation consistency and instructional adjustments

VI. What types of measurement will you use?

The following measurement tools will be used:

- Observation checklists to track student independence during technology center rotations

- Time-on-task tracking sheets for each 15-minute rotation

- Logs to record student requests for help or interruptions

- District-generated i-Ready usage reports

- Teacher reflection forms to analyze instructional effectiveness and identify areas for refinement

VII. What is the focus of your literature review?

The literature review will focus on:

- Technology integration during small-group instruction in early childhood education

- Student independence and self-directed learning in kindergarten

- Structured rotation models and blended learning in mathematics instruction

- Equitable access to technology in Title I classrooms with shared devices

- The use of QR codes and visual supports as optional instructional reinforcement