

Assessment and Data-Informed Decision-Making in Preservice Teacher Education

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Abstract

The presentation highlights a 2-year study regarding assessment knowledge and data-informed decision making skills of early childhood education (ECE) and special education (SE) preservice teachers. Challenges included internal program and field experience changes, external standards revisions, and obtaining a sizeable sample. Data analysis led to program changes to improve teacher candidate performance.

Problem

Assessment is an area for growth for educating **preservice teachers**.

Determine validity of our locally developed **Major Assessments** when compared to standardized assessment.

Need for analysis of **data-informed decision-making** for the continuous improvement of the teacher preparation program.

Teacher Performance Assessment (edTPA) implementation (required in some states) increased the expectations for what preservice candidates need to know upon teacher preparation program completion.

Purpose

To improve teacher candidate assessment knowledge and skills.

To compare locally developed assessments with standardized Teacher Performance Assessment (edTPA).

To analyze edTPA and locally developed major assessment scores regarding data-informed decision-making.

To identify areas for program improvement.

To gather teacher candidate perspectives and experiences.

Relevant Literature

Popham, W. J. (2011). Assessment literacy overlooked: A teacher educator's confession. *The Teacher Educator* 46, 265-273. doi: 10.1080/08878730.2011.605048

- Reviews assessment procedures likely to impact educational decisions, and discusses teacher competency regarding external accountability measures that benefit P-12 learners.

Messelt, J. (2004). *Data-driven decision making: A powerful tool for school improvement (white paper)*. Minneapolis, MN: Sagebrush Corporation

- A powerful tool for educational improvement that results in improved teacher quality.

edTPA/AACTE (2013). *FAQ*.

- Assessment tool that focuses on the act of teaching (i.e., planning, instruction, and assessment) and complements basic skills or subject-matter knowledge in existing program assessments.

Research Questions

Research Question 1: How are Licensure Programs in Teacher Preparation at Walden University collecting, analyzing, and using data to make program improvement decisions regarding candidates' knowledge and implementation of data-informed decision-making in K-12 classrooms?

Research Question 2: What are the knowledge and beliefs of candidates enrolled in Licensure Programs in Teacher Preparation at Walden University regarding data-informed decision-making during their demonstration teaching experiences in K-12 classrooms?

Procedures

Collected quantitative and qualitative data from 3 cohorts of preservice candidates ($N = 53$) to evaluate the use of data-informed decision-making skills (Fall 2013, $n = 20$; Spring 2014, $n = 12$; Fall 2014, $n = 21$).

Conducted a pre-post test survey and interviewed teacher candidates from the ECE and SE programs.

Reviewed Demonstration Teaching Seminar Discussion Questions.

Created subscales using items from three major assessments: Lesson Planning Project (LPP), Demonstration Teaching Evaluation (DTE), Teacher Performance Assessment (edTPA)

Data Analysis

Created scales focusing on data-informed decision-making skills on the edTPA, LPP and DTE.

Conducted correlational analyses to determine whether candidate performance on the LPP and DTE with data-informed decision-making components was similar to candidate performance on the edTPA.

Ran paired *t*-tests by cohort to examine differences between assessment scale score means within cohorts on each of the major assessments.

Analyzed qualitative data from interviews and discussion posts to pull out themes addressing data-informed decision-making.

Findings

Performance on assessment-related tasks on LPP was significantly correlated with assessment-related tasks on the edTPA for ECE candidates, but not for SE candidates.

Performance on assessment-related tasks on DTE was not significantly correlated with assessment-related tasks on the edTPA for ECE, nor SE candidates.

Over three semesters, cohort performance on the edTPA and LPP assessment scales improved for ECE candidates, but not for SE candidates (differences between the cohorts were not statistically significant).

Candidate confidence in data-informed decision making skills does not increase from pre-Demonstration Teaching to post-Demonstration Teaching, but they anticipate their skills will improve over time.

Teacher candidates in both programs were required to conduct informal and formal assessments in their field experiences.

Teacher candidates face challenges when conducting assessments (attention span, behavior, individualizing instruction, etc.).

Limitations

One limitation to this study was a small sample size.

This research focuses on one teacher preparation program at an online university.

Conclusions

Assessment skills and data-informed decision-making continue to be focus areas in Walden University teacher preparation programs.

Scores on the ECE Lesson Planning Project are significantly positively correlated with standardized assessments indicating an alignment between data-informed decision-making skills measured on the LPP and the edTPA.

Program improvement has been started by modifying/adding major assessments and adding midterm evaluation for candidates in special education.

Social Change Implications

By ensuring our teacher preparation candidates are knowledgeable in assessment and data-informed decision-making, candidates will be able to plan purposeful instruction. This will directly impact the way students learn and increase achievement.

By comparing a standardized assessment to our program Major Assessments we are able to validate the rigor of our assessments to ensure we are producing highly qualified educators to enter the field of education.