Stephen F. Austin State University

SFA ScholarWorks

Electronic Theses and Dissertations

Spring 5-13-2017

A QUANTITATIVE SURVEY ANALYSIS OF ELEMENTARY PRESERVICE TEACHER PERCEPTIONS OF ASSESSMENT TASKS IN SCIENCE COURSEWORK

Allison D. Killingsworth

Stephen F Austin State University, adkillingsworth@gmail.com

Follow this and additional works at: https://scholarworks.sfasu.edu/etds

Part of the Curriculum and Instruction Commons, Educational Leadership Commons, and the Science and Mathematics Education Commons

Tell us how this article helped you.

Repository Citation

Killingsworth, Allison D., "A QUANTITATIVE SURVEY ANALYSIS OF ELEMENTARY PRESERVICE TEACHER PERCEPTIONS OF ASSESSMENT TASKS IN SCIENCE COURSEWORK" (2017). *Electronic Theses and Dissertations*. 111.

https://scholarworks.sfasu.edu/etds/111

This Dissertation is brought to you for free and open access by SFA ScholarWorks. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of SFA ScholarWorks. For more information, please contact cdsscholarworks@sfasu.edu.

A QUANTITATIVE SURVEY ANALYSIS OF ELEMENTARY PRESERVICE TEACHER PERCEPTIONS OF ASSESSMENT TASKS IN SCIENCE COURSEWORK

Creative Commons License



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License.

A QUANTITATIVE SURVEY ANALYSIS OF ELEMENTARY PRESERVICE TEACHER PERCEPTIONS OF ASSESSMENT TASKS IN SCIENCE COURSEWORK

by

Allison Killingsworth, BBA, M.Ed.

Presented to the Faculty of the Graduate School of

Stephen F. Austin State University

In Partial Fulfillment

of the Requirements

For the Degree of

Doctor of Education

STEPHEN F. AUSTIN STATE UNIVERSITY (May 2017)

A QUANTITATIVE SURVEY ANALYSIS OF ELEMENTARY PRESERVICE TEACHER PERCEPTIONS OF ASSESSMENT TASKS IN SCIENCE COURSEWORK

by

Allison Killingsworth, BBA, M.Ed.

APPROVED:
Karen Embry Jenlink, Ed.D., Dissertation Chair
Patrick Jenlink, Ed.D., Committee Member
Brandon Fox, PhD, Committee Member
Dr. Elizabeth Vaughn, PhD, Interim Chair, Department of Secondary Education and Educational Leadership

Richard Berry, D.M.A., Dean of the Graduate School

ABSTRACT

This replication survey research study sought to further understand preservice elementary teachers' perceptions of assessment tasks they encountered in secondary science coursework. Students are assessed through informal and formal assessments, including close-ended and open-ended questions, through classroom and high-stakes assessments. With great significance placed on high-stakes state assessments, classroom instruction and assessments oftentimes mirror the format of state assessments. The researcher administered a validated Likert scale inventory, the Perceptions of Assessment Tasks Inventory (PATI), to preservice elementary teachers to examine their perceptions of how assessment tasks reflected their knowledge and understanding of science assessment tasks. The researcher found the research participants' perceptions were more positive regarding assessment tasks the teacher had more control over, including the alignment of learning with assessments, and transparency of assessments. The research participants' least positive perceptions were assessment tasks where students had influence over their assessments, including student consultation and diversity in assessments.

ACKNOWLEDGEMENTS

I would like to thank my friends, family, colleagues, cohort members, and the Educational Leadership doctoral faculty at SFA, for their support throughout this journey. Words cannot express the gratitude towards my husband, and fellow cohort member, Lee. Although he had his own research to conduct and dissertation to write, he always listened and provided suggestions every step of the way, from when I was trying to figure out my research topic to the final dissertation defense. I would also like to thank the chair of my dissertation committee, Dr. Karen Embry Jenlink, and committee members, Dr. Patrick Jenlink, and Dr. Brandon Fox. I appreciate their continuous guidance and feedback they provided me.

DEDICATION

This dissertation is dedicated to my husband, daughter, mom, as well as in memory to my dad. Thank you for always encouraging and believing in me!

TABLE OF CONTENTS

		Page
ABSTRA	ACT	iii
ACKNO	WLEDGEMENTS	iv
DEDICA	TION	v
СНАРТЕ	ER	
I.	INTRODUCTION TO STUDY	1
	Background of the Problem	1
	Traditional assessments	2
	Effects of high-stakes testing on classroom assessments	3
	Designing authentic assessments	5
	Statement of the Problem	6
	Purpose of the Study and Research Questions	7
	Definitions	8
	Significance of the Study	10
	Organization of the Study	10
II.	LITERATURE REVIEW	12
	Introduction	12
	Purpose of Assessments	12

	Design of Assessments
	Effects of High-Stakes Standardized Tests on Classroom Assessments1
	Assessed knowledge1
	Pedagogical practices1
	Decontextualized content
	Students' thinking skills
	Measuring Students' Knowledge
	Student-Centered Learning and Assessment
	Constructivism2
	Formative Assessment
	Transfer of Student Learning
	Alternative Assessments
	Authentic Assessments
	Student Motivation and Assessment
	Students' Perceptions of Assessments
	Summary4
III.	METHODOLOGY4
	Introduction4
	Research Questions4
	Sample4
	Instrumentation4
	Research Design4

	Data Collection	51
	Data Analysis	52
	Role of the Researcher	53
	Summary	54
IV.	FINDINGS	55
	Introduction	55
	Findings	56
	Means for PATI scales	57
	Distribution for each scale	58
	Research questions	60
	Research question number one	60
	Research question number two	62
	Research question number three	64
	Research question number four	66
	Research question number five	68
	Factor Analysis	70
	Summary	72
V.	SUMMARY, CONCLUSIONS, IMPLICATIONS, AND	
	RECOMMENDATIONS	73
	Introduction	73
	Summary of the Study	74
	Conclusions of the Survey	76

	Research question number one	78
	Research question number two	80
	Research question number three	83
	Research question number four	85
	Research question number five	86
	Conclusions of the PATI scales	88
	Implications	89
	Recommendations for Future Research	90
	Recommendations beyond Research	91
	Concluding Remarks	92
REFERENCES	S	94
APPENDIX A.		99
APPENDIX B .		102
VITA		112

LIST OF FIGURES

Figure	Page
1.	Mean for Each Scale of the PATI
2.	Level of Skewness for Each Scale of the PATI
3.	Kurtosis for each scale of the PATI50
4.	Scale ratings of each response for the Congruence with Planned Learning Scale
5.	Number of Research Participants for Possible Congruence with Planned Learning Scale Ratings
6.	Scale Ratings of Each Response for the Authenticity Scale
7.	Number of Research Participants for Possible Authenticity Scale Ratings64
8.	Scale Ratings of Each Response for the Student Consultation Scale65
9.	Number of Research Participants for Possible Student Consultation Scale Ratings
10.	Scale ratings of each response for the Transparency scale
11.	Number of Research Participants for Possible Transparency Scale Ratings68
12.	Scale Ratings of Each response for the Diversity Scale69
13.	Number of Research Participants for Possible Diversity Scale Ratings70

LIST OF TABLES

Table	P	age
1.	Scale Statistics for PATI	.57
2.	Factor Loadings for 35 Items of the PATI: Congruence with Planned Learning (CPL)	
3.	Scale Statistics for PATI: Current Study Compared to Dorman and Knightley (2006a)	77
4.	Scale Frequency Ratings for Congruence with Planned Learning Scale	.79
5.	Scale Frequency Ratings for Authenticity Scale	.82
6.	Scale Frequency Ratings for Student Consultation Scale	.84
7.	Scale Frequency Ratings for Transparency Scale	.85
8.	Scale Frequency Ratings for Diversity Scale	87