

AN ANALYSIS OF LOCAL DISTRICT CAPACITY IN THE IMPLEMENTATION OF
OREGON'S EXTENDED APPLICATION COLLECTION OF EVIDENCE
GRADUATION REQUIREMENT

by

THERESA A. LEVY

A DISSERTATION

Presented to the Department of Educational Leadership
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Education

June 2009

University of Oregon Graduate School

Confirmation of Approval and Acceptance of Dissertation prepared by:

Theresa Levy

Title:

"An Analysis of Local District Capacity in the Implementation of Oregon's Extended Application Collection of Evidence Graduation Requirement"

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Education degree in the Department of Educational Leadership by:

Joe Stevens, Chairperson, Educational Leadership
Gerald Tindal, Member, Educational Leadership
David Conley, Member, Educational Leadership
Jean Stockard, Outside Member, Planning Public Policy & Mgmt

and Richard Linton, Vice President for Research and Graduate Studies/Dean of the Graduate School for the University of Oregon.

June 13, 2009

Original approval signatures are on file with the Graduate School and the University of Oregon Libraries.

An Abstract of the Dissertation of

Theresa A. Levy for the degree of Doctor of Education
 in the Department of Educational Leadership to be taken June 2009

Title: AN ANALYSIS OF LOCAL DISTRICT CAPACITY IN THE
 IMPLEMENTATION OF OREGON'S EXTENDED APPLICATION
 COLLECTON OF EVIDENCE GRADUATION REQUIREMENT

Approved: _____
 Dr. Joseph Stevens

Oregon's extended application requirement, adopted by the State Board of Education as a graduation requirement in 2002 coupled with more rigorous state graduation requirements adopted in 2008, have significant capacity implications for local school districts. The purpose of this study was to examine how local school districts in Oregon have implemented the extended application requirement through their existing capacity. District capacity was examined through a survey that asked about four capacity domains: human capacity, organizational capacity, structural capacity, and material capacity. In addition, the survey addressed barriers to implementation as well as capacity needs to support implementation of extended application and new state graduation requirements. A self-administered web-based survey was developed to collect data. The

survey was administered to curriculum administrators in all K-12 public school districts ($N=175$) in Oregon. The response rate was 50% with representation from districts ranging in size from small to large and from all regions of the state, including rural, suburban, and urban settings. The survey used a five-point scale to determine the extent of extended application implementation, district capacity, and implementation barriers. Two open-ended questions asked participants to comment on their capacity needs. Study results showed that extended application implementation progress ranged from very little progress to great progress in districts across the state. The new graduation requirements were identified as a barrier to extended application and will likely impede implementation progress further. Additionally, in multiple regression analysis, district capacity was a predictor of extended application implementation and reflected that districts lacked the capacity to support implementation. Interrelationships were found between the four district capacity domains and implementation which suggest that capacity should be viewed holistically and comprehensively. Furthermore, district capacity analysis should be more intentional in the policy process in order to inform state policy decisions. Capacity-building needs were identified including: increased state-level guidance, time for teachers and administrators to collaborate, and a need for additional professional development, financial resources, and staffing. A coherent, state-wide strategy is recommended to build district capacity to support implementation of extended application and the new graduation requirements.

CURRICULUM VITAE

NAME OF AUTHOR: Theresa A. Levy

PLACE OF BIRTH: Detroit, Michigan

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
Oregon State University, Corvallis
Oregon Institute of Technology, Klamath Falls
Ferris State University, Big Rapids

DEGREES AWARDED:

Doctor of Education in Educational Leadership, 2009, University of Oregon
Master of Science in Nutrition and Food Science, 1990, Oregon State University
Bachelor of Science in Education, 1978, Ferris State University

AREAS OF SPECIAL INTEREST:

Educational Leadership
State Policy and Local Implementation
High School Reform

PROFESSIONAL EXPERIENCE:

Education Specialist, Oregon Department of Education
Salem, Oregon, 1996-present

Project Manager for Workforce 2000 Health Services Project
Portland Public Schools, Portland, Oregon, 1994-1996

Assistant Professor, Oregon Institute of Technology
Klamath Falls, Oregon, 1978-1992

ACKNOWLEDGMENTS

I would like to thank the members of my committee, Doctors Joseph Stevens, Gerald Tindal, David Conley, and Jean Stockard for their support and guidance. I also acknowledge and thank my colleagues, Doctors Colleen Mileham, Michelle Hooper, Salam Noor, and Rob Larson whose support and encouragement made achieving this goal possible. Most of all, I am grateful for the blessing of my family and friends whose love and countless prayers lifted and carried me through to the end. I especially want to thank my mother, my sister Chris, my dearest friend Phyllis, and my angel Eric for their loving encouragement and inspiration.

To my mother, whose inner strength and resilience inspires me.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Extended Application Graduation Requirement.....	2
District Capacity	6
Significance of the Study	7
Research Questions	8
II. REVIEW OF THE LITERATURE.....	9
Implementation of Performance Assessments.....	9
History of Performance Assessments	10
Performance Assessment Research.....	12
State Policy-Local Implementation.....	16
Policy Implementation Research	17
Policy Implementation Process.....	19
Role of the Local District.....	22
District Capacity.....	23
Human Capacity.....	24
Organizational Capacity.....	26
Structural Capacity.....	28
Material Capacity.....	28
Capacity Building	29
Conceptual Framework	30
III. METHODOLOGY	33
Research Design.....	33
Participants.....	33
Survey Design and Instrumentation.....	34
Data Collection	37
Data Analysis	38

Chapter	Page
IV. RESULTS	40
Demographics	41
District Size.....	41
Geographic Representation	42
Participants by District Job Title.....	43
Survey Instrument Reliability	43
Extended Application Implementation	45
Assessment Formats.....	45
Required Components.....	46
Curriculum Practices.....	47
Evaluation Practices.....	48
Implementation Progress	49
Multiple High Schools	50
District Capacity	51
Human Capacity.....	51
Organizational Capacity.....	53
Structural Capacity.....	55
Material Capacity.....	56
Multiple Regression Analysis	59
Implementation Barriers.....	62
Capacity Needs for Extended Application	63
Time	64
Financial Resources	64
State-Level Guidance.....	65
Professional Development	65
Staffing/FTE	66
Capacity Needs for the New Graduation Requirements	66
State-Level Guidance.....	67
Professional Development	68
Staffing/FTE	69
Financial Resources	70
V. DISCUSSION	72
Limitations of the Study.....	73
Policy Implications.....	76
Recommendations	86
Conclusions	92

Chapter	Page
APPENDICES	
A. OREGON DIPLOMA REQUIREMENTS.....	94
B. STUDY SURVEY.....	96
C. CAPACITY FRAMEWORK FOR SURVEY DEVELOPMENT.....	102
D. SURVEY INVITATION LETTER	107
E. LETTER OF SUPPORT FOR SURVEY PARTICIPATION.....	109
F. INITIAL SURVEY NOTIFICATION LETTER.....	110
G. COMMENTS TO QUALITATIVE SURVEY QUESTIONS	111
H. EXTENDED APPLICATION CAPACITY NEEDS GROUPED BY THEMES	121
I. NEW GRADUATION REQUIREMENTS CAPACITY NEEDS GROUPED BY THEMES	126
J. CONCEPTUAL FRAMEWORK FOR A STATE POLICY-LOCAL IMPLEMENTATION PROCESS	132
REFERENCES	135

LIST OF FIGURES

Figure	Page
1. Conceptual Framework of the Study	32
2. Human Capacity Mean	52
3. Organizational Capacity Mean	54
4. Structural Capacity Mean	55
5. Material Capacity Mean	57
6. A Conceptual Framework for State Policy-Local Implementation Process.....	132

LIST OF TABLES

Table	Page
1. Characteristics of Extended Application	4
2. District Size.....	41
3. Geographic Representation.....	42
4. Internal Reliability Consistency Among Scaled Questions for Extended Application Implementation, District Capacity, and Barriers	44
5. Extended Application Assessment Formats.....	46
6. Extended Application Required Components.....	47
7. Extended Application Curriculum Practices.....	48
8. Extended Application Evaluation Practices.....	49
9. District Capacity Means.....	51
10. Pearson's Correlation Coefficients of District Capacity and Extended Application Variables	60
11. Overall Results for Regression Model Predicting Extended Application Implementation	61
12. Barriers to Implementation of Extended Application.....	62
13. Policy and Capacity Analysis Questions in a Policy-Implementation Process	133

CHAPTER I

INTRODUCTION

To graduate from an Oregon high school all students must demonstrate extended application. Extended application is defined in Oregon Administrative Rule (OAR) 581-022-0102 as, “The application and extension of knowledge and skills in new and complex situations related to the students’ personal, academic, and/or career interests and post-high school goals” (Oregon Secretary of State, 2009). The Oregon Administrative Rule (OAR) 581-022-1130 for graduation requires each student to “build a collection of evidence, or include evidence in existing collections, to demonstrate extended application” (Oregon Secretary of State, 2009).

A collection of evidence is defined in Oregon Administrative Rule (OAR) 581-022-1120 as, “The work of a student collected and evaluated together to measure the student’s ability to apply what the student knows and can do in relation to a set of standards or criteria” (Oregon Secretary of State, 2009). According to the Oregon Department of Education (2005) collections of evidence could include single, multi-faceted projects or samples of student work through various experiences, tasks, and activities.

The extended application graduation requirement, adopted by the Oregon State Board of Education in 2002 and required for graduation in 2007, has significant implications for local district capacity. In addition, new graduation requirements adopted

by the State Board in 2008 (Oregon Department of Education, 2007) add to the complexity of local implementation and increase district capacity needs. Currently, the state education department lacks information about local extended application implementation practices and the extent of district capacity to support implementation of this requirement and the new graduation requirements.

This study was designed to examine how local school districts in Oregon have implemented the state extended application graduation policy through their existing capacity through four capacity domains: human capacity, organizational capacity, structural capacity, and material capacity and the relationship of district capacity with extended application implementation. Further, implementation barriers were identified as well as district capacity needs to support implementation of extended application and the new graduation requirements.

Extended Application Graduation Requirement

Over the past four decades, Oregon has championed education reforms with state policies to strengthen the quality and performance of the educational system and improve outcomes for students. The origin of the current extended application graduation requirement comes from the Oregon Educational Act for the 21st Century enacted in the early 1990s. This landmark legislation established the Certificate of Advanced Mastery (CAM), a high school certification with broad outcomes and portfolio-based assessments delivered through career pathways.

As the standards-based system in Oregon evolved, the Certificate of Advanced Mastery was later revised in 1995 eliminating career pathways and establishing the requirement for extended application. The administrative rule for the Certificate of Advanced Mastery (OAR) 581-022-1131 required students to “meet a performance standard for extended application through a collection of evidence” for CAM certification. Certificate of Advanced Mastery performance standards (proficiency and sufficiency criteria) were adopted by the State Board in 2005 (Oregon Department of Education, 2005). Table 1 further describes the characteristics of extended application defined by the state (Oregon Department of Education, 2005).

The Certificate of Advanced Mastery was optional for students and not required for graduation. In 2002, the State Board of Education made a policy decision to incorporate the Certificate of Advanced Mastery requirements into the high school diploma as a graduation requirement for all students. The graduation requirement did not, however, require state performance standards as did CAM certification. With no state performance standards each district was left to define performance for extended application locally. Though performance requirements were not explicated in administrative rule, the state education department encouraged local districts to use the adopted Certificate of Advanced Mastery performance standards or establish local proficiency criteria.

Lack of state criteria for the graduation requirement was noted in a regional implementation study (Hargett & Fielding, 2007) in which high school practitioners described extended application as vague and elusive compared to traditional academic

requirements, and further expressed that it lacked operational specificity. According to Avery, Beach, and Coler (2003), lack of clearly defined state standards impedes local implementation.

TABLE 1. Characteristics of Extended Application

Characteristics of Extended Application	Implementation Considerations
Require self-direction and personal management to plan, monitor, and complete tasks.	Students need to choose either the task, or the methods used to accomplish the task. For example, a teacher may give an assignment to students, but to be an extended application, the student will need to have the freedom to determine means and methods to accomplish the task.
Use of academic, career-related, and technical knowledge and skills in a relevant context, demonstrating in-depth understanding and skills.	Students perform tasks relevant to his/her personal, academic, and/or career interests and post-high school goals. The student's post high school goals determine the knowledge and skills to be used. The context, task, project, etc. determines the sophistication of knowledge and skills. The collection is judged on the relevancy to the student rather than the sophistication of knowledge and skills.
Extend prior knowledge through critical thinking, problem solving, or inquiry in real world contexts.	Students need to make significant decisions in either the tasks or methods used and tasks need to be more than routine procedures to be real world context. Students need to go beyond reporting information, using the information in a way that leads to new understanding.
Integrate knowledge and skills from more than one discipline	Students go beyond performing routine activities that require application of multiple skills from different disciplines which may include academic and career and technical education.
Communicate new learning, ideas, results, or conclusions.	Student reflections play an important role in describing their new learning, often connecting their conclusions to their career choices.

The extended application graduation requirement, demonstrated through a collection of evidence, has assessment implications for districts. That is, evidence of student demonstration is expected in order for local districts to make a graduation decision. Research shows that implementation of local performance assessments have considerable implementation challenges for districts and schools (Aschbacher, 1991; Hargreaves, et al., 2002; Khattri, Reeves, & Adamson, 1997; Lane, Parke, & Stone, 2002; Wolfe & Miller, 1997).

The state graduation requirements were again revised in 2007 with additional requirements for a new Oregon Diploma that would prepare students to be college-ready and work-ready (see Appendix A). The following requirements were added: students must demonstrate evidence of proficiency in nine essential skills, science and mathematics credits were increased, districts must provide students credit for proficiency options in lieu of time-based Carnegie Units, and mathematics credits have to be at the Algebra I level and above. What's more, extended application, with implicit local performance assessment expectations, and the other personalized learning requirements remained in the new Oregon Diploma. Implementation of all of the existing and new graduation requirements has significant implications for local district capacity.

The state graduation requirements, requiring both personalization and increased academics, create a challenging context for implementation within districts. As noted by Hargett and Fielding (2007), educators reported tensions between the extended application (and other personalized learning requirements) and increased academic requirements, surfacing issues of competing priorities in an environment of diminishing

resources and limited capacity. These practitioners felt that the demands of implementing the federal accountability requirements of No Child Left Behind (U.S. Department of Education, 2002) coupled with the new state academic requirements were impinging on electives and career-related opportunities for students. The report further noted that system-wide accountability processes that drive district priorities did not include extended application outcomes.

District Capacity

State policy is enacted with the intent of changing practice at the local level. In reality, however, there is often a gap between state policy intentions and local implementation (Hargrove, 1975). Implementation of state policy is mediated at the local level by the school district (Berman, 1978; Conley, 2003; McLaughlin, 1989). As Conley (2003) noted, “local school districts exist in principle to serve the goals of the state” (p. 11). Nonetheless, districts create the conditions for implementation (Fullan, 2001) and determine local response to state policy, influenced by local capacity and context.

District capacity plays a significant role in state policy implementation (Dutro, Fisk, Koch, Roop, & Wixon, 2002; Massell, 1998; Sipple, Killeen, & Monk, 2004; Spillane & Thompson, 1997). Capacity in this study refers to the districts’ ability to achieve the goals and intent of the state policy (Century, 1999). District response to state standards and assessment is linked to their capacity to support complex reforms (Bulkley, Fairman, & Martinez, 2002). State assessment policies, entwined in complex education reforms, place demands on local school district capacity and challenges successful

implementation (Florian, Hange, & Copeland, 2000). State policymakers were advised to take capacity into account and recognize the need for capacity building in districts to effectively implement complex education reforms (Bulkley et al., 2002; Century, 1999; Dutro et al., 2002; Florian et al., 2000; Massell, 1998; Spillane & Thompson, 1997).

Significance of the Study

This study is significant in light of recent Oregon State Board of Education actions to adopt new graduation requirements for the Oregon Diploma. Findings from this study provide policymakers with information about implementation of the existing extended application graduation requirement and district capacity upon which to evaluate current policy. Further, this information will help inform the state regarding capacity needs for the new graduation requirements and capacity building efforts.

The role of district capacity is illuminated through four capacity domains (human, organizational, structural, and material) allowing a deeper understanding of capacity and its relationship to implementation. The interrelationships found between the capacity domains and implementation suggests that policymakers need view capacity more holistically and comprehensively in the policy process. As a result of my research, I have designed a conceptual framework for capacity analysis in a systematic policy process that could be used to improve policy decision-making. The goal is to strengthen state-local relationships to develop state policies that are more likely to be successfully implemented.

Understanding the role of the district capacity in the implementation of education reform has become increasingly more important and of interest (Marsh, 1999; Spillane, 1996; Spillane & Thompson, 1997). This statewide study contributes to the research on district capacity by examining state policy implementation and capacity trends across school districts in one state. Research on district capacity has been conducted primarily through qualitative case studies involving few districts and often comparing different reform policies across states (O'Toole, 1986). Furthermore, this quantitative study provided statistically significant findings regarding the interrelationships among district capacities building upon and expanding previous qualitative case study research.

Research Questions

The purpose of this study was to examine how local school districts in Oregon have implemented the state extended application graduation policy through their existing capacity and to identify implementation barriers and capacity needs.

1. What practices are being used to implement the extended application graduation requirement in Oregon school districts?
2. What are the interrelationships among the four district capacity domains:
 - a. Human capacity (knowledge, understanding, commitment)
 - b. Organizational capacity (internal and external supports)
 - c. Structural capacity (district policies and procedures)
 - d. Material capacity (allocation of resources)
3. What are the relationships between district capacities and extended application implementation?
4. What are the capacity needs of districts to implement extended application and the new graduation requirements?

CHAPTER II

REVIEW OF THE LITERATURE

For purposes of this study, the literature review is organized by three areas of research: Implementation of Performance Assessments, State Policy-Local Implementation, and District Capacity. The conceptual framework for this study is derived from these areas of research.

Implementation of Performance Assessments

Performance assessments include methods in which students “produce an answer, rather than select one” (Council of Chief State School Officers [CCSSO], 2001, p. 19). Examples may include performance tasks, portfolios, projects, exhibitions or demonstrations, extended constructed response, and short constructed response. Performance assessments are often referred to as nontraditional or alternative assessments, which typically mean assessments other than traditional, multiple choice testing and require students to perform, demonstrate, or produce evidence (Khattri & Sweet, 1996; Messick, 1998). As Messick (1998) pointed out, however, differences between multiple choice items and performance tasks is “not a dichotomy, but a continuum” representing degrees of structured format and open-ended response (p. 61).

Another term used to describe this form of assessment is authentic, meaning measures of actual student performance on tasks that are valued outside of the classroom,

such as a solving problem, conducting research, or collaborating with others to find solutions (Resnick & Resnick, 1996). Authentic performance assessments are based on tasks that resemble what adults would encounter in their daily work (Meyer, 1992) and engage students in powerful, productive learning (Hargreaves et al., 2002). Similarly, Wiggins (1990) suggested that performance assessments were about “doing” while traditional assessments relied on “indirect or proxy items” (p. 1).

Most state assessment programs include some alternative forms of assessment in conjunction with traditional multiple-choice testing (CCSSO, 2001). The most common alternative form used was constructed response reported by 41 states. The least used were portfolio/collections of student work reported by eight states and only six states reported using projects, exhibitions, and/or demonstrations. A number of states used multiple measures for making high school graduation decisions, combining both traditional testing and performance assessment indicators (Darling-Hammond, Rustique-Forrester, & Pecheone, 2005).

History of Performance Assessments

The use of performance assessments or alternative forms of assessment grew out of the educational reforms of the 1990s in response to the changing knowledge-based economy (CCSSO, 2001; Stiggins, 1991). A number of influential reports were published such as *A Nation at Risk* (National Commission on Education in Excellence, 1983) warning that American schools were failing to prepare students with 21st century skills. Higher order thinking skills, problem solving, team work, and communication skills were

becoming increasingly more important in the workplace (Aschbacher, 1991; CCSSO, 2001). These were described as skills that “go beyond those that are typically taught and assessed” (CCSSO, 2001, p. 19) and alternative assessments were intended to evaluate these high performance skills.

During that era as well, widespread use of multiple-choice, norm-referenced testing for accountability purposes drew strong criticism (Darling-Hammond et al., 2005; Khattri et al., 1997; Resnick & Resnick, 1996). Critics of standardized testing suggested that students would not likely engage in the higher order thinking skills when accountability systems used only conventional multiple-choice testing (Darling-Hammond et al., 2005). According to Darling-Hammond (1994), schools were compelled to “teach to the tests” (p. 16) and often deemphasized pedagogical practices that promoted complex thinking skills. Resnick and Resnick (1996) also noted that when standardized indirect measures were emphasized, teachers tended to focus instruction on improving test performance at the expense of actual performance. Paris (1998) argued that high-stakes standardized testing “undermined effective teaching and learning” (p. 193). Performance assessments were promoted as a way to drive reform and change instruction focused on more complex cognitive performances in the classroom (Pellegrino, 2004).

Advances in the cognitive sciences and constructivist theory supported student-centered teaching and learning and fueled the performance assessment movement (Baron, 1998; Khattri et al., 1997; Pellegrino, 1999). In “learner-centered” assessments students actively construct their own meaning, use metacognition and self-assessment, have

experience in applying and transferring their knowledge, work in groups, and encounter problems that are interesting, meaningful, challenging, and engaging (p. 217). The Committee on the Foundations of Assessment (National Research Council, 2001) recommended that “assessment practices need to move beyond a focus on component skills and discrete bits of knowledge to encompass the more complex aspects of student achievement” (p. 3).

Performance Assessment Research

Research on performance assessments is limited while standardized testing has been the focus of assessment research (Stiggins & Bridgeford, 1985). Khattri et al., (1997) pointed out that wide variation in performance assessment strategies makes systematic study and evaluation difficult. Stiggins (1991) argued that the dearth of research and development of performance assessments “have left us ill-equipped to meet the technical challenges associated with the growing demand for alternatives” (p. 270).

Professional development is often lacking in standards-based assessment implementation (Avery et al., 2003; Cromey & Hanson, 2000) and teacher preparation programs have not adequately prepared teachers to work with performance assessments (Cromey & Hanson, 2000; Stiggins & Bridgeford, 1985). Avery et al. (2003) reported that less than 10 percent of teachers perceived their preparation in performance assessments as excellent while more than one-third reported their preparation as poor.

Avery et al., (2003) examined teachers’ perceptions of the impact of Minnesota’s “Profile of Learning” performance assessment on teaching and learning. A third of the

teachers reported positive changes in teaching and learning, while most reported that the time commitment and lack of preparation made implementation problematic. Stiggins and Bridgeford (1985) studied the level of use and concerns of teachers' classroom assessment practices in eight districts from across the country. They too reported teachers' concerns regarding their ability to effectively integrate performance assessments into their classrooms considering the time needed to develop and manage assessments.

Hargreaves et al., (2002) found that the complexities of performance assessments were demanding on teachers' time for implementing these practices. Studies in schools from elementary school on up to higher education found that lack of time was a significant challenge. Shapely and Bush (1999) examined the use of portfolio assessments in the Dallas Public School District. They examined the extent to which assessments met technical standards and found portfolios were of low quality, problems with scoring, and inadequate teacher training. Wolfe and Miller (1997) studied the severity of potential barriers to implementation in 16 secondary schools from across the country. Their findings also showed that time and scoring of portfolio assessments were too difficult to overcome, even for highly motivated teachers. Tisani (2008) found that lack of time and heavy workloads was prohibitive in using portfolio assessments among a group of academics in a university study.

Falk, Ort, and Moirs (2007) piloted a classroom-based performance assessment of literacy in 19 elementary schools in the state of New York involving 63 teachers from 1997-1998 with follow-up studies in 2001 and 2005. Consistent with other studies, they

found that initially time was an issue for most teachers but reported that the districts' investment of time and resources in building teachers' capacity for scoring and managing evidence resulted in positive changes in teaching practices.

Regarding student performance, in a review of research on portfolio assessments Black and Wiliam (1998) noted that teachers commonly reported the benefit of student reflection of their own work as an important learning outcome. Similarly, in an experiment involving the use of portfolios in an algebra course, Slater, Ryan and Samson (1997) found no difference on an achievement test between the group using portfolio assessments and the control group. They noted, however, that students in the portfolio group exhibited more complex skills that were not reflected in the multiple choice test.

Khatti et al., (1997) studied the use of performance assessments in 16 schools, divided among elementary, middle, and high schools across the country and found that students' motivation to learn and improvement in writing skills were the most commonly reported outcomes. Lane et al. (2002) examined the impact of the Maryland School Performance Assessment Program on mathematics instruction and student outcomes over a five year period. They found positive changes in mathematics instruction and gains in student mathematics achievement.

Niemi, Baker, and Sylvester (2007) reported promising results in a seven-year performance assessment collaborative project between the Los Angeles School District and the University of California, Center for Research on Evaluation, Standards, and Student Testing (CRESST). They found that teachers' assessment skills and reliability in scoring and school accountability were improved through district-wide capacity building

efforts. The districts' professional development efforts were focused on assessment and teacher collaboration to improve student performance.

Khattari et al., (1997) also found that professional development focused on building teachers' capacity for performance assessments was critical. Other factors that positively influenced implementation included a high level of teacher involvement in assessment design and the commitment of leaders to allocate resources that allowed time for teachers to learn, work together, and improve instructional techniques. Cromeey and Hanson (2000) found that district commitment to capacity building to develop teachers' skills was evident in schools with well-developed student assessment systems. Aschbacher (1999) reported that schools were more likely to see performance assessments as part of "mainstream assessment and instruction" and relevant when states used and reported assessment data on schools (p. 286).

In addition to the challenges of time and teacher training, other barriers associated with implementing performance assessments included lack of efficiency, manageability, and cost (Madaus & O'Dwyer, 1999), lack of public credibility (Aschbacher, 1991) and limited teacher preparation in assessments (Avery et al., 2003; Stiggins & Bridgeford, 1985). Psychometricians questioned the reliability, validity, generalizability, and fairness of performance assessments compared to traditional, standardized testing (Dunbar, Koretz, & Hoover, 1991; Linn, Baker, & Dunbar, 1991; Madaus & O'Dwyer, 1999; Messick, 1998; Pelligrino, 2004). Messick (1998) argued that standards of validity are the hallmark of any type of testing, including performance assessments.

Khattri et al., (1997) found that a barrier to teacher buy-in was the lack of coordination of performance assessments with competing reforms. This caused uncertainty and confusion and teachers' unwillingness to invest in the process. Aschbacher (1991) also reported that problems with logistics, keeping records, storage of materials, and class schedules were problematic for implementing performance assessments.

State Policy-Local Implementation

State adopted policies are put into practice in local school districts through an implementation process (Fowler, 2004). Implementation is defined by Fullan (2001) as “a process of putting an idea, program, or set of activities and structures new to the people attempting or expected to change” (p. 69). As this definition connotes, policy is intended to change practice. In reality, however, there is often disparity between policy intent and the desired change at the local level (Hargrove, 1975; McLaughlin, 1989; Odden, 1991).

The success of a policy is dependent upon what transpires in the implementation process (Fowler, 2004; LaRocque, 1986; Spillane, Reiser, & Reimer, 2002). The implementation process is complex (Fullan, 2001), involves multiple actors (O'Toole, 1986), is influenced by local context (Datnow, 2005) and requires capacity (Spillane & Thompson, 1997). McLaughlin (1976) referred to implementation as a “variable, uncertain, and inherently local process” (p. 348). Furthermore, schools are not readily adaptable to change making implementation of education reforms challenging (Conley, 2003).

Policy Implementation Research

Research spanning the past four decades reveals the complex nature of policy implementation (Fowler, 2004; McLaughlin, 1987; 1989; Odden, 1991; O'Toole, 1986). First generation implementation research conducted in the early 1970s challenged the assumption of policymakers that policy implementation was a rational process (Odden, 1991; Fowler, 2004; McLaughlin, 1976; 1987; 1989). Fullan (2001) pointed out the “fallacy of rationalism”:

When policy makers require by law that schools achieve a goal which in the past they have not achieved, they may be engaged in wishful thinking. They behave as though their desires concerning what a school system should accomplish, will in fact, be accomplished if the policy makers simply decree it. (p. 98)

Researchers discovered that implementers “did not always do as told” and that they had to have the will to carry out a policy directive (McLaughlin, 1987, p.186). The response of implementers was found to be strongly influenced by local context, laden with their own beliefs and values which may or may not be congruent with state policy. As McLaughlin (1987) stated, “policymakers can’t mandate what matters” (p. 187). Additionally, Fowler (2004) noted that implementation was dependent upon capacity stating, “All the will in the world cannot overcome the lack of capacity, or inability to do what the policy requires” (p. 271) i.e. the knowledge, skills, materials, and time to implement.

Second generation implementation research in the late 1970s examined the implementation process and what effects it had over time (Fowler, 2004). An important study of that era, The Rand Change Agent Study, examined federally funded programs

supporting educational innovations in 18 states from 1973-1978 (Berman & McLaughlin, 1976; McLaughlin, 1976; 1989). Researchers found that successful implementation was a result of “mutual adaptation” in which the project design (e.g. goals, treatment, or expectations) and local practice were both modified to reflect local context (Berman & McLaughlin, 1976; McLaughlin, 1976; 1989). Mutual adaptation was dependent on the substance and scope of the project design; the greater the degree of complexity, the greater the adaptation. Researchers found that implementation was sometimes only “symbolically implemented” in that it lacked the substance or intent of the policy (Berman & McLaughlin, 1976, p. 353).

Odden (1991) referred to a third stage of policy implementation research which began to look at the effectiveness of policy implementation and more specifically at implementation issues. Fuhrman, Clune, and Elmore (1988) studied state education reforms in six states during the early 1980s. They found that these reforms more closely matched educators’ notion of schooling and current practice and were met with less resistance. In contrast, reform policies that emerged in the 1990s required more transformational change that had a greater impact on teacher practice and student learning (Conley, 2003). Conley (2003) noted that state policies of this nature often lacked the clarity and state guidance needed by local districts to navigate complex changes.

O’Toole (1986) did an extensive review of policy implementation research examining the extent to which empirically-based recommendations were utilized. He found lack of agreement among researchers regarding theory and the variables associated with implementation success and noted that recommendations were often contradictory

among researchers. Most of the research was approached inductively through case studies and advice often lacked empirical basis (O'Toole, 1986). The research further lacked an attempt to test insights and build theory from previous studies and failed to report on how recommendations were used by policymakers. Fowler (2004) also noted that policy implementation today continues to "repeat the errors of the past" (p. 274).

Policy Implementation Process

Implementation is a complex process and success is influenced by a number of variables (Elmore, 1983; Fullan, 2001; LaRocque, 1986). Fullan (2001) described nine critical factors that interact as a "system of variables" in implementation grouped under three categories (p. 71). The first category, *characteristics of change*, involves: need, clarity, complexity, and quality/practicality. The district needs to see a fit between the new policy and district needs. The lack of clear goals and expectations can lead to anxiety and frustration or oversimplified interpretation. The second category *local factors*, involves the social conditions and organizational culture of the district and includes all local stakeholders in the process. The third category, *external factors*, involves the broader societal context including government and other agencies that provide "pressure and support" (p. 87).

Considering the multiple variables that factor into the process, there are many reasons for implementation to fail. Spillane et al. (2002) noted the following: policy ambiguity, the magnitude of change, competing policy signals from various levels of

government, incongruence with local context, lack of capacity, and the unintentional misunderstanding or misinterpretation of policy.

Weak or unsuccessful implementation is sometimes attributed to “resisters and saboteurs” on the part of local implementers, yet there are examples of faithful implementation that end in failure (Spillane et al., 2002, p. 391). Policymakers often assume that implementers understand what is expected of them (Fullan, 2001; McLaughlin, 1989). However, this assumption fails to consider the implementers’ need to make sense of the policy. As Spillane et al. (2002) pointed out, local implementers derive the meaning of a policy from “the interaction of their existing cognitive structures (including knowledge, beliefs, and attitudes), their situation, and the policy signals” referred to as “sense-making” (p. 388). Districts construct their own understanding and interpret policy as a consequence of their existing knowledge, influenced by social context and organizational structures.

Sense-making embedded in social interactions such as professional development, networking, and other forms of learning communities is integral to the implementation process (Coburn, 2005; Fullan 2001; Spillane, 2002). Through social interactions, districts can help to facilitate a shared understanding of state policy. Sense-making has implications for how policymakers design, convey, and communicate policy and how local implementers interpret them. Policymakers must clearly communicate the underlying principles and the rationale of the reform policy and create “a sense of dissonance” to challenge local implementers to examine current beliefs and practices (Spillane et al., 2002, p. 418).

Fowler (2004) warned that implementation should “never be taken for granted” by policymakers (p. 269). Nonetheless, as Fullan (2001) suggested, policymakers do not pay enough attention to implementation and often underestimate potential problems:

One of the basic reasons why planning fails is that planners or decision makers of change are unaware of the situations faced by potential implementers. They introduce changes without providing a means to identify and confront the situational constraints and without attempting to understand the values, ideas, and experiences of those who are essential for implementing any changes. (p. 98)

And on the other hand, local implementers are not often aware of the policy world (Fullan, 2001). Partnerships between state and local entities are needed to support successful policy implementation (Barber, 2008; Conley, 2003; Fullan, 2001; 2008; Walker, 2004). Conley (2003) argued that local districts could contribute to the policy process in a more deliberate way, informing state policy decisions based on their direct work with schools and suggested that systematic two-way communications would improve policymaking and implementation.

Levin (2008) also stressed the need for ongoing, interactive communication between the state and local districts including all stakeholders in the district and community. Barber (2008) too advocated for strong and purposeful two-way communication with “frontline professionals” as a part of the implementation process and noted that “very few governments get this right” (p. 93). Two-way communications can reveal implementation problems associated with complex reform policies that may not be evident to policymakers (Fullan, 2008).

Implementation is an integral step in the policy process (Fowler, 2004; Sjogren, 1978). Sjogren (1978) suggested the following questions be addressed in anticipation of

implementation during the policy formulation stage: “At whom is the program targeted? What is the scope of the program? By what means or techniques will program goals be effected? By what criteria will the success of the program be determined? What types of resources will be necessary to effect program goals? Who will provide these resources and who should bear their costs? What types of costs will the program incur?” (p. 212). Similarly, Fowler (2004) recommended a “forward mapping” process before implementation begins in which resource needs for a fully implemented policy are identified to the extent possible.

Role of the Local District

The role of school districts in state policy-local implementation has become increasingly more prominent (DuFour, DuFour, & Eaker, 2008; Marsh, 2000; MacIver & Farley, 2003; Odden, 1991; Spillane, 1996). Districts mediate the local response to state policy (Marsh, 2000). They influence the extent to which the state’s policy message gets communicated and shape opportunities for practitioners to learn about state policy (Spillane, 1996). Districts create the conditions for implementation (Fullan, 2001) and determine whether corresponding implementation efforts are superficial or substantive (Bulkley et al., 2002). They may either intentionally ignore or unknowingly misconstrue the policy message (Marsh, 2000).

Many factors such as local context, existing district and community norms, values, and beliefs (Datnow, 2005; Rossman & Wilson, 1996; Walker, 2004), district size (Dutro et al., 2002), political culture (Sipple et al., 2004), district leadership (Berman &

McLaughlin, 1976) and human interactions (Spillane, 1996) play into how and why districts respond as they do. Dutro et al. (2002) reminded policymakers to “take note that state policies come into conversation with local contexts and individuals. Districts are not blank slates, but rather places with particular histories and competing force that shape the implementation of new policy” (p.808).

In a literature review on districts’ role in education reform Marsh (2000) found three key supports for successful implementation: district capacity (human, social, and physical including time and materials) was critical for change and sustainability; district administrators’ knowledge and understanding influenced resource allocation and general support; and district leadership support in building professional community and culture. Similarly, another literature review conducted by MacIver and Farley (2003) identified key district supports for capacity building including creating a district-wide culture for student achievement and a providing a coherent strategy for professional development. Waters and Marzano’s (2006) meta-analysis of district leadership found successful districts used collaborative goal-setting strategies and allocated resources to support those goals, including time, money, training, personnel, and materials.

District Capacity

District capacity plays a significant role in local implementation of education reforms and determines the districts response to state policy (Fullan, 2001; Marsh, 2000; Sipple & Killeen, 2004; Sipple, Killeen, & Monk, 2004; Spillane & Thompson, 1997). Century (1999) stated that capacity has become a “core attribute” of the systemic

education reform process (p. 1). Goertz, Floden, and O'Day (1995) referred to capacity as the system's ability to meet its education reform goals, within the context of education reform. Century (1999) defined capacity as "an entity's ability to achieve the goals of a reform" in relation to the individuals in the system and the system itself (p. 3).

Spillane and Thompson (1997) described three interrelated dimensions of district capacity – human capital, social capital, and financial capital. Similarly, Century (1999) proposed an organizational framework for evaluating capacity based on four dimensions: human capacity, organizational capacity, structural capacity, and material capacity. These capacities are interdependent rather than discrete constructs (Century, 1999; Spillane & Thompson, 1997). Voss (1998) in Century (1999) noted that "whole capacity of a system can be limited by insufficient capacity in any single area" (p. 6).

Human Capacity

Human capacity refers to individuals' knowledge, skills, self-perceptions (Florian et al., 2000), commitment and dispositions (Spillane & Thompson, 1997) and attitudes (Goertz et al., 1995). Century (1999) delineated human capacity as "intellectual proficiency" (knowledge and understanding) and "district will" (interest and persistence) (p. 3).

The knowledge and understanding by district personnel influence the extent to which implementation of a state policy is realized as intended (Spillane, 2002). Goertz et al. (1995) noted that individuals needed to view themselves as learners in the reform process. Districts with high human capacity mobilized individuals with knowledge to

create a “knowledgeable collective” (Spillane & Thompson, 1997, p.193). Bulkley et al., (2002) studied six districts implementing state standards and assessment policies in New Jersey. District response ranged from reliance on “test-prep” activities to more “in-depth reform-oriented strategies.” They found that administrators in the more reform-minded districts understood what teachers needed and demonstrated a commitment to support their learning (p. 11).

Sense-making is critical to understanding policy expectations and developing human capacity within a district (Coburn, 2005; Dutro et al., 2002; Rossman & Wilson, 1996; Schmidt & Datnow, 2005; Spillane et al., 2002). Spillane et al. (2002) described sense-making as a process “for how [implementing agents] construct understandings of the policy message, construct an interpretation of their own practice in light of the message, and draw conclusions about potential changes in their practice as a result” (p. 392).

In a four year longitudinal study in five comprehensive high schools in the state of Maryland, Rossman, and Wilson (1996) found wide variation in how these schools interpreted or made sense of new state graduation policy, based on their own context and culture. Dutro et al. (2002) studied four Michigan school districts’ response to new state standards and concluded that the purposeful attention to helping teacher make sense of the new standards influenced successful policy implementation.

District “will” to carry out a state policy is expressed in the attitude (Spillane & Thompson, 1997), interest and persistence (Century, 1999) and motivation (Fairman & Firestone, 2001) of the implementers. District will is influenced by local leaders’

understanding of what is expected and how they perceive its fit with local expectations (Fairman & Firestone, 2001; McLaughlin, 1987) and existing beliefs and values (Spillane, 2002). Bulkley, et al. (2002) found that the districts' will to change practices to increase test scores was strongly motivated by external pressures from the community. Fairman & Firestone (2001) and found that the political culture, the relationship between the state and districts, and local expectations largely influenced district response.

Organizational Capacity

Organizational capacity is about relationships, communication (Century, 1999) and district culture (Mid-Continent Research for Education and Learning [MCREL], 2000). Spillane and Thompson (1997) referred to this as social capital as it is about human interactions. Networking, partnerships, and collaboration are key dimensions of organizational capacity (Bulkley et al, 2002; Spillane, 2005; Spillane & Thompson, 1997).

Organizational capacity is developed through external partnerships with universities, professional organizations, business community, and other districts as well as through internal relationships and peer support among local educators within the district (Bulkley et al., 2002; Florian et al., 2000). Networking both inside and outside the district provided opportunities for dialogue and reflection (Florian et al., 2000), developing shared understanding and common goals (Bulkley et al., 2002), and gaining new insights and perspectives (Spillane & Thompson, 1997). Peer interaction and through professional learning communities can be an effective strategy for building

human capacity (DuFour et al., 2008; Fullan, 2001; 2008). Social networking was influenced by the culture and norms (Marsh, 2000; MCREL, 2000) and trust and collaboration (Wolfe, Bork, Elliott, & McIver, 2002) of the professional community.

Spillane and Thompson (1997) found that networks and collaboration were necessary for learning but the districts' commitment toward a reform policy determined the extent to which networks and collaboration were mobilized suggesting that human and organizational capacity were interdependent. Organizational capacity creates access to knowledge (Goertz et al., 1995) and the opportunity for sense-making (Spillane et al., 2002).

Schmidt and Datnow (2005) argued that districts needed to “invest considerable energy and resources into making sure that teachers are knowledgeable about the reform...” (p. 962). Hoyle, Samek, and Valois (2008) argued that professional development is key to local capacity and should be a district priority. Fullan (2001) cautioned that implementation will fail without processes that allow staff to develop new understandings.

Massell (1998) studied capacity building efforts in eight states and found that networks were commonly used locally or regionally to provide opportunities to build knowledge and skills, provide assistance, and to create and disseminate products to local practitioners. Spillane and Thompson (1997) found that networks were particularly beneficial to small districts enabling them to leverage financial and staffing resources that would not otherwise be available to them.

Structural Capacity

Structural capacity refers to the policies, practices, and procedures that operationalize implementation of the reform in the district. These may include, for example, curriculum frameworks, hiring practices, curriculum adoption procedures, and other functional elements (Century, 1999; Florian et al., 2000). Bulkley et al. (2002) found staffing patterns varied among districts they studied from no changes in hiring to adding district staff to function as coordinators of reform processes. MCREL (2000) studied 16 districts across 13 states, examining district response to state standards and assessment policy. District responses included processes to monitor student achievement data, focused professional development programs, and changes in scheduling and staffing. Dorr-Bremme and Herman (1986) found that successful implementation of assessment policies required district leadership, advocacy, on-going resource and support systems.

Material Capacity

Material capacity includes the fiscal resources (e.g. budgets, external funding) and materials such as curriculum and instructional resources, technology support, meeting space (Century, 1999), staffing and time (Spillane & Thompson, 1997). Hoyle et al., (2008) noted that time as a material capacity has a financial cost. The Oregon *Quality Education Commission Final Report* (Quality Education Commission, 2008) recognized the capacity for time as a valued asset for school improvement and student achievement and recommended investment of time for professional development, teacher

collaboration, and leadership training for administrators and planning in the Quality Education Model.

Time for teachers to learn how to use performance assessments and work together (Khattri et al., 1997) and the allocation of time for planning, release time, and paid summer time (David, 1997) were important to teachers' receptivity to implementing reforms. Spillane and Thompson (1997) found that in successful districts, substantial time was allocated to learning about the state policies to develop a level of understanding and to be able to teach others about the reform. However, the commitment of time alone was not enough, rather how time was used or the quality of interaction among individuals was more important. How the use of time was structured depended on local leaders' knowledge and commitment to reform or their human capacity.

MCREL (2000) found that districts' investment in professional development and reallocation of staffing to support implementation was common among the districts in their study. These districts also leveraged resources and some supplemented districts funds through grants. MacIver and Farley (2003) noted that resource allocation for implementation was a demonstration of the district administrators' understanding (human capacity) of the reform.

Capacity Building

Researchers called for a closer analysis of district capacity given the complexity of recent education reforms (Bulkley et al., 2002; Century, 1999; Dutton et al., 2002; Florian et al., 2000; Goertz et al., 1995; Massell, 1998; Spillane & Thompson, 1997).

State policymakers were advised to take capacity into account and recognize the need for capacity development in districts to effectively implement complex reforms (Bulkley et al., 2002; Elmore, 1990; Goertz et al., 1995; Massell, 1998; Spillane, 2005).

Century (1999) argued that policymakers needed to shift their efforts from control to capacity building. Bulkley et al. (2002) viewed capacity building in districts as an asset and “effective policy tool” for policymakers (p.27). And Fullan (2008) argued that “neglect of capacity building has been the fatal weakness of reform policies...” (p. 284) and Hargreaves and Fullan (1998) noted, “No complex social reform has ever worked without investing in local capacity building” (p. 123).

Capacity building in the context of education reform should be strategic (Dutro et al., 2002) systemic (Massell, 1998) and multifaceted (Goertz, et al., 1995) and focused on results (Fullan, 2008). Massell (1998) analyzed capacity building strategies in eight states and found four common strategies: utilizing external groups such as regional service providers, networks, professional associations, and higher education to provide professional development and technical assistance; setting professional development and training standards; providing curriculum materials, supporting documents, or resource banks; and organizing and allocating resources – money, time, personnel.

Conceptual Framework

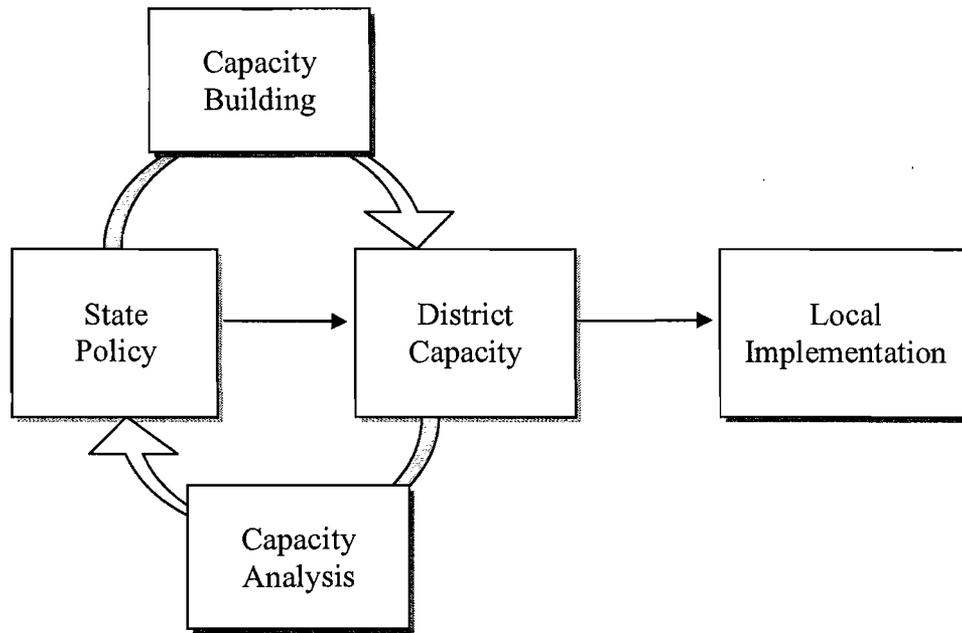
The literature review focused on three areas of research which established the basis for my conceptual framework: implementation of performance assessments, state-policy-local implementation, and district capacity. Performance assessments require

students to perform or demonstrate evidence of learning. It should be noted that the research on performance assessments is limited; however, the literature reports some positive outcomes including increased student motivation and achievement, demonstration of complex thinking skills and reflection of students' own learning. Nevertheless, due to their complex nature, performance assessments have been fraught with implementation challenges. Capacity building, most notably teacher time and training are needed for effective implementation of performance assessments.

State policies are mediated by the district which impact how policies are implemented at the local level. District response to education reform policies is influenced by the districts' capacity to support complex, systemic reforms. District capacity is delineated by four types: human capacity, organizational capacity, structural capacity, and material capacity. All four capacities are interrelated and necessary for successful implementation. State policymakers are advised to take capacity into account and recognize the need for capacity building to effectively implement complex reforms.

The conceptual framework for this study is illustrated in Figure 1. Local implementation of state policy (extended application collection of evidence) is mediated by district capacity (human, organizational, structural, and material). Capacity analysis informs state policy development and capacity building efforts to support successful implementation.

FIGURE 1. Conceptual framework of the study.



CHAPTER III

METHODOLOGY

Research Design

This study used a non-experimental, descriptive research design and survey methodology (Meltzoff, 1998). The unit of analysis was the school district. A survey instrument was developed to collect data and analyze survey results using descriptive statistical, correlational, and multiple regression analysis (Rea & Parker, 2005). Web-based technology was used for statewide data collection that was feasible and cost efficient (Rea & Parker, 2005) and data analysis more convenient (CCSSO, 2001). The decision to survey all K-12 school districts versus a sample was determined in consultation with the Oregon Department of Education. Statewide data from this study will provide a baseline for further analysis beyond this dissertation.

Participants

The survey was administered to all K-12 public school districts ($N = 175$) in the state of Oregon. K-8 school districts were not included since the focus of this study was on high school graduation requirements and implementation of the extended application requirement would not directly apply to the K-8 grade level. District curriculum administrators were the targeted group to receive the survey as they are typically responsible for implementing district-wide school improvement. The names and contact

information of curriculum administrators were obtained with permission from an existing distribution list used by the Oregon Department of Education, Office of Educational Improvement and Innovation. E-mail communication was used to contact study participants and deliver the survey.

Survey Design and Instrumentation

A self-administered survey (see Appendix B) was designed to collect quantitative data on extended application implementation practices, district capacity, and implementation barriers, and qualitative data on capacity needs. District capacity was examined through four domains: human capacity, organizational capacity, structural capacity, and material capacity (Century, 1999; Florian et al., 2000; Spillane & Thompson, 1997). The instrument was organized into four sections: (1) Demographics, (2) Extended Application Implementation, (3) District Capacity, and (4) Barriers and Capacity Needs. The survey contained a total of 18 questions and 63 items. The last section included two open-ended questions for qualitative responses. Each section had instructions for answering the questions and included definitions of key terms.

A capacity framework was developed as an organizing structure to develop the survey questions and align them with the four research questions. The framework was adapted from a model designed to evaluate capacity in systemic reform (Century, 1999). See capacity framework in Appendix C. For each of the capacity domains, key indicators of district capacity associated with improved school districts were identified in the

literature review (Bulkley et al. 2002; Florian et al., 2000; Goertz et al., 1995; Massell, 1998; MCREL, 2000; Shannon & Bylsma, 2004).

The key indicators of district capacity included knowledge, understanding, and commitment for human capacity; internal and external supports (partnerships, networking, collaboration, and culture) for organizational capacity; district policies and procedures for structural capacity; and allocation of resources (time, staff, materials, and budget) for material capacity. State guidance documents (Oregon Department of Education, 2005) were used to identify key indicators of extended application implementation practices under the following subcategories: assessment formats, required components, curriculum practices, and evaluation practices. Using the framework as an organizer, survey questions were developed, linked to the key indicators and clustered under each of the four capacity domains and extended application implementation.

Further, survey questions pertaining to implementation barriers and capacity needs were developed. Potential barriers to extended application implementation were identified from a regional study in Oregon (Hargett & Fielding, 2007) and in consultation with state Department of Education staff. And finally, two open-ended questions were developed to determine capacity needs. The capacity framework and survey questions were reviewed by the study's dissertation committee.

An expert panel in areas of performance assessments, state policy, and district capacity was consulted to evaluate content validity of the survey instrument. Six individuals, including national researchers and assessment developers, policymakers, and

a district Superintendent, were selected who had expertise in the areas mentioned and were familiar as well with Oregon's educational reforms. The experts were sent a description of the purpose of the study and the research questions as background along with the survey questions and a rating form. They were asked to evaluate the extent to which each survey question was appropriate to the study and the extent to which item was appropriate to the question on a rating scale of 1 to 5 in which 1 = the item was not appropriate and 5 = the item was highly appropriate. They were also instructed to indicate if important items were left out. The panel's input was summarized and used the development of the survey for data collection.

A web-based survey tool (<http://www.surveymonkey.com/>) was used to create the survey instrument. The survey was piloted on-line with seven Oregon K-12 school districts in June 2008. Pilot school districts ranged in size from small to large and included rural, urban, and suburban settings. Geographic locations included eastern Oregon, central Oregon, the north Oregon coast, the Willamette Valley and Portland. The purpose of the pilot was to assess the survey for clarity, comprehensiveness, and acceptability in terms of survey length (Rea & Parker, 2005). Pilot participants were asked to complete the on-line survey and answer five evaluation questions at the end on a 4-point rating scale in which 1 = strongly disagree and 4 = strongly agree. They were also asked how long it took them to complete the survey and to provide any additional comments or recommendations. Participants agreed or strongly agreed with the survey as designed, with a recommendation to add a definition of extended application.

Data Collection

An invitation letter to participate in the study was e-mailed to the identified curriculum administrator in each K-12 school district. For the seven pilot districts, a different individual was asked to participate in the actual survey in order to include their district in the study. The invitation letter included an internet link to the survey and instructions for completing the survey. The letter explained the purpose of the study, how the data would be used, and informed them of confidentiality and risks entailed in participation. Responses were kept anonymous and personal identification was computer encrypted to protect respondents' identity. The letter also informed potential respondents that participation in the study was voluntary and that completing the survey constituted their consent to participate (see Appendix D).

To encourage participation, benefits of participating in the study were communicated, which included the opportunity to inform state policy decision-making and capacity building efforts concerning the state graduation requirements. In addition, a letter of support from the Executive Director of the Confederation of Oregon School Administrators (COSA) was obtained to accompany the invitation letter and survey (see Appendix E).

The survey process was conducted over a six week period from September 9, 2008 to October, 17, 2008. Using procedures recommended by Creswell (2003) the following steps were taken to increase response rate: (1) a short notice was e-mailed one week in advance with the letter of support from COSA attached, (2) the invitation letter with survey link and letter of support from COSA was e-mailed, (3) a reminder notice

with survey link was e-mailed to non-respondents one week later, and (4) a second reminder notice with survey link was e-mailed to non respondents and partial respondents three weeks later.

Data Analysis

Data were collected using the web-based Survey Monkey software (Survey Monkey, 2007). The collected data were checked and analyzed for completed responses. Each partially completed survey was reviewed and any survey that did not contain responses in all of the survey categories was eliminated. Data were then transferred from the web-based program to an Excel file. The file was checked to be sure that all data transferred then downloaded the Excel file into the statistical program, Statistical Package for Social Sciences (SPSS), Version 16 (2007). Once the data were transferred to SPSS, variables were defined and missing values were identified and coded.

The qualitative data were downloaded into an Excel spreadsheet and analyzed. Reading through each comment, major themes were identified inductively and assigned a code (Strauss & Corbin, 1990). The frequency of responses was calculated for each code (Fink, 2003; Strauss & Corbin, 1990). Comments that included multiple themes were categorized and counted under more than one theme. Extraneous comments that were unrelated to the question were discarded (Fink, 2003). All respondents' comments are found in Appendix G.

Statistical tests included descriptive statistics and frequencies, correlations and regression analysis. Multiple regression analysis and pairwise correlations (Pedhazur,

1997) were used to examine relationships among the district capacities and extended application implementation. In this analysis, the four district capacities (human, organizational, structural, and material) were the independent variables and extended application implementation was the dependent variable.

As previously described, content validity of the instrument was evaluated using a team of experts to determine if the survey questions were appropriate and sufficiently covered the content and objectives of this study (Meltzoff, 1998). The survey instrument was piloted with K-12 school districts to evaluate the survey for clarity, comprehensiveness, and acceptability of the instrument (Rea & Parker, 2005). Following data collection, internal consistency of the survey instrument was estimated using Cronbach's alpha.

CHAPTER IV

RESULTS

This chapter presents the findings from a survey administered to K-12 school districts in Oregon. Invitations to participate in the on-line survey were sent electronically to curriculum administrators in 175 school districts. One hundred and thirteen people responded to the survey (64%) in total. Of the total respondents, 88 individuals completed all sections of the survey, 25 only partially completed the survey, and one opted out. The 25 respondents who partially completed the survey answered the demographic questions but did not respond to questions in the remaining sections of the survey. Only the respondents who completed all four sections of the survey ($N=88$) were included in the results representing a 50% response rate.

The survey instrument was organized into four sections: (1) Demographics, (2) Extended Application Implementation, (3) District Capacity, and (4) Barriers and Capacity Needs. The survey contained a total of 18 questions and 63 items. The last section included two open-ended questions designed to find out the respondents' perspectives on their districts' capacity through an inductive analysis (Strauss & Corbin, 1990).

Demographics

District Size

Participant demographics included district size by student enrollment, number of high schools served, geographic locale by region and setting type, and participants' role (see Table 2). A large percentage of respondents represented small to mid-size school districts. Half of the respondents (51%) represented districts with a student enrollment between 500 and 3,000 and 30% represented districts with less than 500 students. Most respondents (83%) represented districts serving one high school while 17% served multiple high schools (2 or more).

TABLE 2. District Size

	%	<i>N</i>
Number of students in the district (<i>N</i> = 87)		
Less than 500	29.9	26
Between 500 and 3,000	50.6	44
Between 3,000 and 10,000	12.6	11
Over 10,000	6.9	6
	%	<i>N</i>
Number of high schools in the district (<i>N</i> = 88)		
1	83.0	73
2-3	11.4	10
4 or more	5.7	5

Geographic Representation

Survey respondents were distributed across the state with representation from every geographic region (see Table 3). Thirty-percent of respondents were from the Willamette Valley, 26% were from eastern Oregon at 26%, 14% from the Portland/Metro and southern Oregon, 13% from the coastal regions, and 5% from central Oregon. Eighty-two percent of respondents were from rural, 14% were from suburban, and 5% from urban areas of the state.

TABLE 3. Geographic Representation

	%	<i>N</i>
Geographic region of the state (<i>N</i> = 88)		
Central	4.5	4
Eastern	26.1	23
Southern	13.6	12
Coast	12.5	11
Portland/Metro	13.6	12
Willamette Valley	29.5	26
	%	<i>N</i>
Type of setting (<i>N</i> = 88)		
Urban	4.5	4
Suburban	13.6	12
Rural	81.8	72

Participants by District Job Title

Respondents were asked to fill in their job title. Of the 88 people responding, 55% were district superintendents or assistant superintendents, 17% were school principals or assistant principals, and 25% included in their titles director of curriculum, instruction, or teaching and learning. The remaining individuals held a unique title such as Director of School Improvement, Director of Secondary Education, Director of Special Programs, Director of Secondary and Alternative Programs, Business Manager/Deputy Clerk, and Public Information Officer. Some individuals had more than one title.

Survey Instrument Reliability

Survey instrument reliability was estimated using Cronbach's alpha for questions in the sections of the survey with quantitative scales. Table 4 displays the Cronbach's alpha coefficients for the following survey sections: extended application implementation, district capacities, and implementation barriers.

There was a range in the size of the reliability coefficients for the extended application implementation questions. Scores in question 6 a-f concerning the required components for extended application had an estimated reliability of .911. Questions regarding assessment formats had an estimated reliability of .732. The reliability coefficients for the questions concerning human capacity was .771, organizational capacity .852, structural capacity .840, material capacity .813, and implementation barriers .844.

TABLE 4. Internal Reliability Consistency Among Scaled Questions for Extended Application Implementation, District Capacity, and Barriers

Questions	Cases <i>N</i>	Missing	Items <i>N</i>	Cronbach's Alpha
Extended Application Implementation				
Assessment Formats Question 6a-f	80	8	6	.732
Required Components Question 7a-e	80	8	7	.911
Curriculum Practices Question 8a-d	80	8	4	.438
Evaluation Practices Question 9a-e	75	13	8	.656
Combined EAI Means Questions 6-10	87	1	5	.903
District Capacities				
Human Capacity Question 12a-e	86	2	5	.771
Organizational Capacity Question 13a-d	86	2	4	.852
Structural Capacity Question 14a-d	84	4	4	.840
Material Capacity Question 15 a-e	84	4	5	.813
Combined Capacity Means Questions 12-15	88	0	4	.899
Implementation Barriers				
Question 16a-i	79	9	9	.844

Reliability was also estimated for the average means for extended application implementation and district capacity. Both had a high degree of reliability with a coefficient of .903 for extended application implementation and .899 for district capacity.

Extended Application Implementation

This section describes participants' answers to questions about implementation of extended application in the responding districts' high schools. These questions were measured on a 5-point rating scale in which 1 = not at all, 2 = to a small extent, 3 = to a moderate extent, 4 = to a great extent, 5 = to a very great extent. In the following sections, to simplify interpretation, the percentages for *very great extent* and *great extent* were combined and reported as *great extent* and percentages for *small extent* and *not at all* were reported as *small extent*. The average means and standard deviation for extended application implementation was $M = 3.36$, $SD = .67$.

Assessment Formats

Survey question six asked to what extent various assessment formats were being used for extended application (see Table 5). Sixty-four percent of respondents indicated that projects (e.g. senior project, capstone project) were used to the greatest extent ($M = 3.72$) followed by classroom work samples ($M = 3.43$). Other assessment formants used included research paper ($M = 3.40$), portfolios or collections of evidence ($M = 3.28$), exhibitions/demonstrations ($M = 3.10$), and a check-off list ($M = 3.07$).

Fifteen respondents checked *other* and four respondents wrote in additional comments as follows (in verbatim): the use of multiple samples/examples; exploring formative assessments; reflective writing relating to interests, coursework, and training to career interests and experiences; and not sure what all means.

TABLE 5. Extended Application Assessment Formats

	<i>N</i>	<i>M</i>	<i>SD</i>
Senior projects	88	3.72	1.20
Classroom work samples	87	3.43	1.00
Research paper	85	3.40	1.08
Portfolio or collection of evidence	86	3.28	1.05
Exhibition or demonstrations	86	3.10	1.12
Check off list	82	3.07	1.24
Other	15	1.73	1.28

Required Components

Survey question seven asked to what extent the listed components were required for extended application (see Table 6). Seventy-three percent of respondents indicated that the students' personal and/or career interest was required for extended application to a great extent. Relevance to the students' post-high school goals was the next followed by student responsibility for managing their work, integration of career-related learning standards, student reflection of their learning, and the integration of academic standards. A small percentage of respondents (below 10%) indicated that one or more these components were not include at all or to a small extent. The component required least

often was apply to new or non-routine situations with only 26% indicating implementation to a great extent and 30% not at all or to a small extent.

Twelve respondents checked *other* as a response and four people wrote in additional comments as follows (in verbatim): ed plan and profile on grade 9 campus, CIS, work samples are going to be more important; includes integration of career-related learning experiences, related to career areas of interest; all juniors and seniors have an ASPIRE advisor; and participating in CRLE activities.

TABLE 6. Extended Application Required Components

	<i>N</i>	<i>M</i>	<i>SD</i>
Personal and/or career interests	85	4.00	.80
Relevant to post-high school goals	84	3.89	.81
Student responsibility for managing own work	86	3.83	.83
Integration of career-related learning standards	85	3.80	.94
Student reflection of their learning	86	3.78	.94
Integration of academic standards	84	3.70	.82
Applied to new or non-routine situations	81	2.98	.95
Other	12	1.83	1.40

Curriculum Practices

Survey question eight asked where extended application was implemented in the high school curriculum (see Table 7). Respondents reported that extended application was implemented most often in specialized courses, such as a Senior Seminar or Advisory. Academic courses were next followed by elective courses. Extended application was least often implemented outside of the school in the community.

Ten respondents checked *other* and three wrote in additional comments as follows (in verbatim): assigned on-staff monitors and off-staff mentors; signature courses in 11th and 12th grade career academies; and advisory time once a week.

TABLE 7. Extended Application Curriculum Practices

	<i>N</i>	<i>M</i>	<i>SD</i>
Senior seminar or advisory class	86	3.70	1.17
Academic courses	85	3.30	.96
Elective courses	86	3.17	.91
Outside of school in the community	82	2.77	1.05
Other	10	2.20	1.93

Evaluation Practices

Survey question nine asked what practices were used to evaluate extended application (see Table 8). Sufficiency criteria and proficiency criteria were both used to a great extent by 44% and 43% of the respondents respectively. Assessment scoring methods were determined by the individual teacher more often than the district. Extended application was evaluated by individual teachers more often than by a panel of community members. Twenty-one percent of the respondents reported that they did not use a community member panel at all and 48% did not engage in peer evaluation at all. Few respondents trained evaluators to score student work. Fifty-nine percent trained evaluators to a small extent or not at all.

Ten respondents checked that they used *other* evaluation practices, however only one commented (in verbatim): assessment scoring methods determined by the state, i.e. writing scoring guide and the “old” speaking rubric.

TABLE 8. Extended Application Evaluation Practices

	<i>N</i>	<i>M</i>	<i>SD</i>
Sufficiency criteria	84	3.36	1.06
Proficiency criteria	86	3.34	1.11
Methods determined by the teacher	85	3.14	1.09
Evaluated by an individual teacher	85	3.15	1.13
Methods determined by the district	83	3.06	1.16
Evaluated by panel of community members	86	2.99	1.43
Evaluators trained to score student work	83	2.39	1.77
Other	10	1.0	.00

Implementation Progress

The mean and standard deviation for extended application implementation progress was $M = 3.41$ and $SD = .98$. Forty percent of the respondents reported that their districts' high schools have made a great deal of progress and 12% reported exemplary progress, while 20% reported very little or some progress.

Five respondents checked *other*, and five wrote in additional comments as follows (in verbatim): currently meeting requirements and are additionally in study to implement Sr. project; we're continuing to work on it; the level of connectedness to any components referenced in the implementation manuals is still at an elementary level; we fully

implemented the requirement beginning with the Class of 2007; we are at the operational level.

Multiple High Schools

Fifteen respondents represented districts with two or more high schools. Of the 15 respondents, most indicated that their responses to the survey questions pertaining to extended application implementation were consistent among their high schools to a great extent ($M = 3.53$, $SD = 1.51$).

In summary, extended application implementation results showed that districts were using a variety of assessment formats with project-type (e.g. senior or capstone project) the most common. Most schools in these districts required all extended application components defined by the state with the exception of *applied to new or non-routine situations*, which occurred less frequently. In some districts the scoring method was determined and carried out by individual teachers whereas in others it was prescribed by the district. About the same number of districts used community member evaluators as did not. Nearly 60% of the districts did little or no training of evaluators. The extended application implementation progress made in schools ranged on a continuum, with 20% of the districts reporting little or some progress and 52% reporting a great deal or exemplary progress.

District Capacity

This section reports the results of survey questions pertaining to the existing capacity of districts to support implementation of extended application in their high schools. Survey questions were organized by human capacity, organizational capacity, structural capacity, and material capacity. The district capacity questions were measured on a 5-point rating scale in which 1 = not at all, 2 = to a small extent, 3 = to a moderate extent, 4 = to a great extent, 5 = to a very great extent. The percentages for *very great extent* and *great extent* were combined and reported as *great extent* and percentages for *small extent* and *not at all* were reported as *small extent*. The average means and standard deviations for the four district capacities are presented in Table 9.

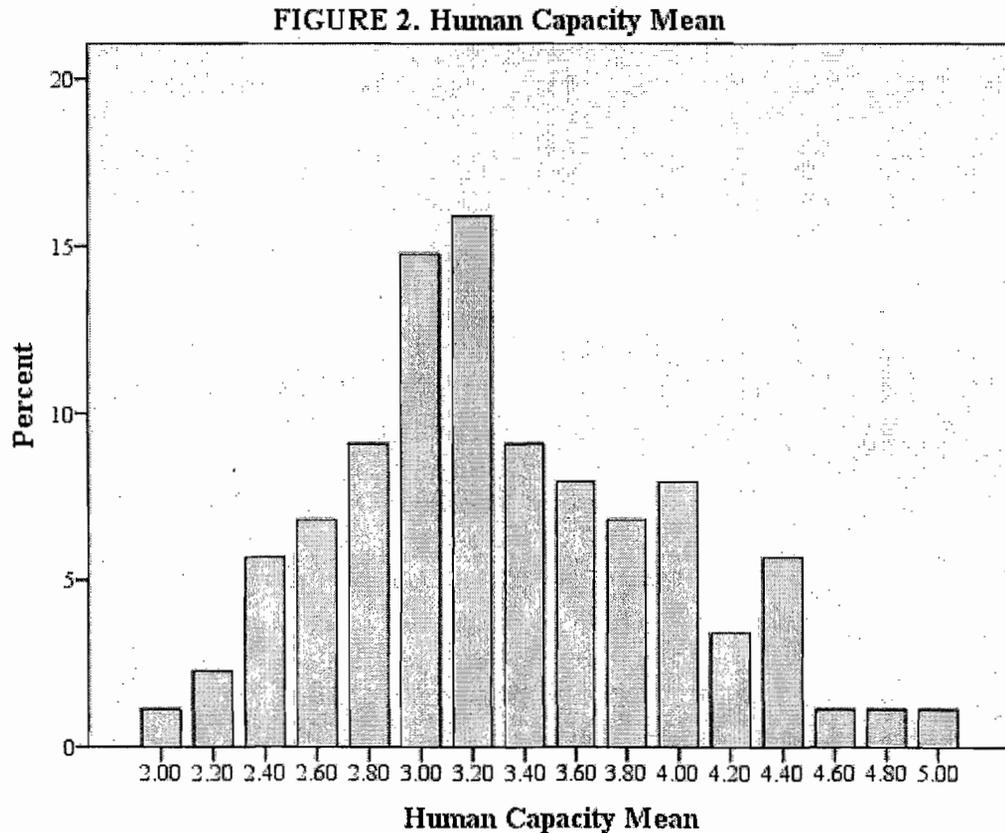
TABLE 9. District Capacity Means (N=88)

	<i>M</i>	<i>SD</i>
Human Capacity	3.32	.64
Organizational Capacity	2.72	.88
Structural Capacity	3.10	.94
Material Capacity	2.72	.88

Human Capacity

The survey questions for human capacity relate to the knowledge, understanding, and commitment to extended application by individuals in the district. The means for question 12 a-e ranged from 2.70 to 3.79. The combined mean for the human capacity

measure was $M = 3.32$, $SD = .64$. Figure 2 shows the distribution of means for human capacity.



The results for question 12 a-e are ordered by the size of the mean with the largest mean reported first. Sixty-one percent of respondents reported that district leadership was committed to extended application implementation to a great extent, 31% to a moderate extent, and 8% to a small extent ($M = 3.79$, $SD = .93$). Fifty-two percent of respondents reported that extended application was consistent with the districts' goals for student achievement to a great extent, 39% to a moderate extent, and 9% to a small extent ($M = 3.53$, $SD = .84$). Thirty-nine percent of respondents reported that district staffs were

knowledgeable about the state requirements for extended application to a great extent, 40% to a moderate extent, and 22% to a small extent ($M = 3.30$, $SD = .95$). Thirty-two percent of respondents reported that high school staffs were receptive to extended application to a great extent, 55% to a moderate extent, and 13% to a small extent ($M = 3.28$; $SD = .79$). Seventeen percent of respondents reported that local school board members understood the extended application graduation requirement to great extent, 40% to a moderate extent, and 43% to a small extent ($M = 2.70$, $SD = .89$). Figure 2 shows the distribution of means for human capacity.

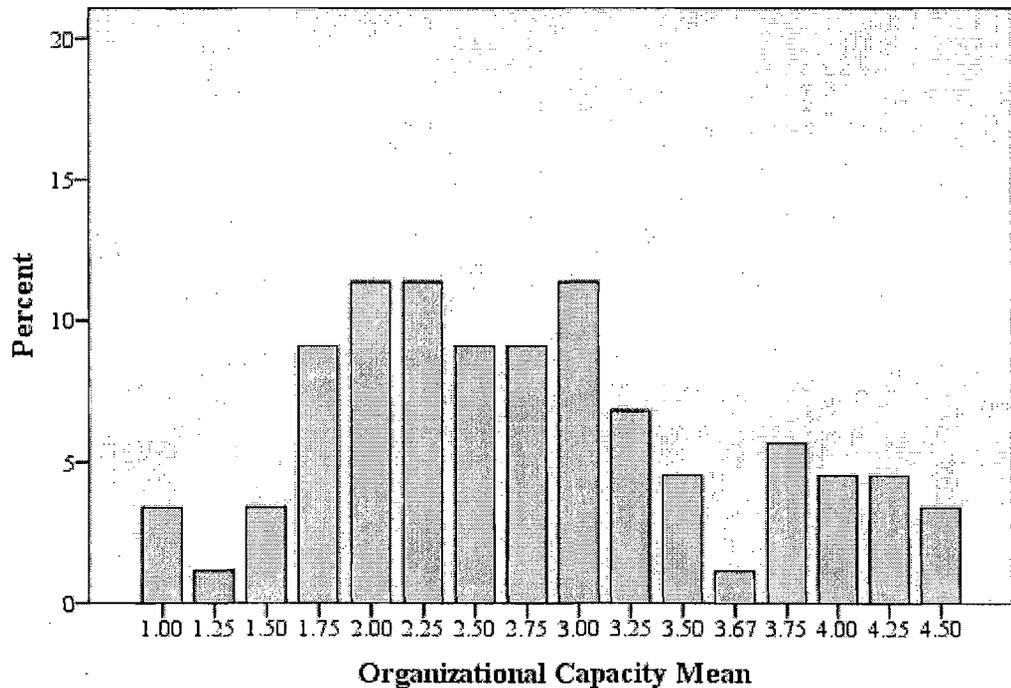
Organizational Capacity

The survey questions for organizational capacity pertain to relationships among individuals within and outside of the district to support extended application implementation (i.e. collaboration, networking, partnerships, and district culture). This section explored the extent to which the district has supported implementation through professional development, networking, partnerships and developing a shared culture for understanding extended application. The means for question 13 a-d ranged from 2.53 to 2.88. The combined mean and standard deviation for the organizational capacity measure was $M = 2.72$, $SD = .88$. Multiple modes were present. Figure 3 shows the distribution of means for organizational capacity.

The results for question 13 a-d are ordered by the size of the mean with the largest mean reported first. Thirty percent of respondents reported that teachers have had

networking opportunities to learn about and share extended application practices to a great extent, 29% to a moderate extent, and 41% to a small extent ($M = 2.87, SD = 1.08$).

FIGURE 3. Organizational Capacity Mean



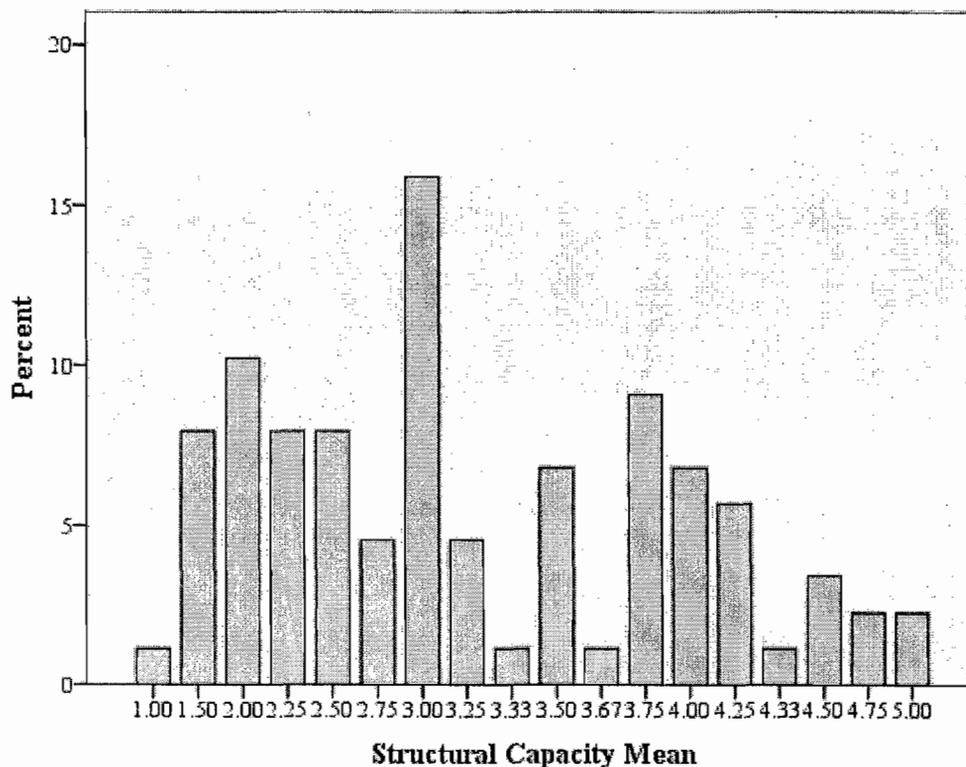
Twenty-eight percent reported that teachers received professional development to build their capacity for implementation to a great extent, 28% to a moderate extent, and 43% to a small extent ($M = 2.81, SD = 1.03$). Nineteen percent reported that districts have created a shared vision of extended application across the district to a great extent, 35% to a moderate extent, and 47% to a small extent ($M = 2.63, SD = .97$). Twenty-four percent reported that districts have partnered with external organizations for support of

extended application implementation to a great extent, 21% to a moderate extent, and 56% to a small extent ($M = 2.53$, $SD = 1.11$).

Structural Capacity

The survey questions for structural capacity relate to the functional elements of the system such as policies and procedures to support implementation. The means for question 14 a-d ranged from 2.98 to 3.20. The combined mean and standard deviation for the structural capacity measure was $M = 3.10$, $SD = .94$. Figure 4 shows the distribution of means for structural capacity.

FIGURE 4. Structural Capacity Mean



The results for question 14 a-d are ordered by the size of the mean with the largest mean reported first. Forty-one percent of respondents reported that districts have a recognition of the students' completion of extended application to a great extent, 33% to a moderate extent, and 26% to a small extent ($M = 3.20, SD = 1.19$). Thirty-nine percent reported that districts adopted local policies or requirements for extended application to a great extent, 27% to a moderate extent, and 34% to a small extent ($M = 3.05, SD = 1.19$). Thirty-six percent reported that districts monitored extended application in their schools to a great extent, 27% to a moderate extent, and 36% to a small extent ($M = 3.00, SD = 1.13$). Thirty-six percent reported that extended application was coordinated with other district standards-based school improvement efforts to a great extent, 26% to a moderate extent, and 39% to a small extent ($M = 2.98, SD = 1.13$).

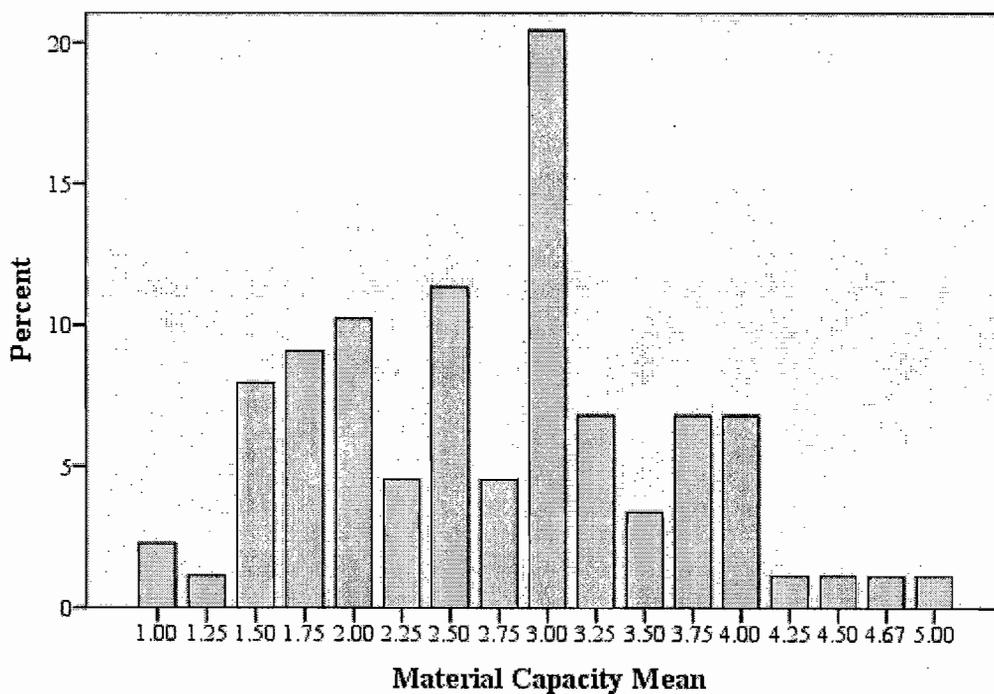
Material Capacity

The survey questions for material capacity relate to the fiscal and material resources available to support extended application in the district. The means for question 15 a-e ranged from 1.75 to 2.85. The combined mean and standard deviation for the material capacity measure was $M = 2.72, SD = .88$. Figure 5 shows the distribution of means for material capacity.

The results for question 15 a-e are ordered by the size of the mean with the largest mean reported first. Thirty percent of respondents reported that curriculum and instructional resources were provided by the district to extended application implementation to great extent, 30% to a moderate extent, and 41% to a small extent

($M = 2.84$, $SD = .98$). Twenty-four percent reported that resources were allocated to provide time for teachers to work together on extended application implementation to a great extent, 33% to a moderate extent, and 43% to a small extent ($M = 2.72$, $SD = 1.07$).

FIGURE 5. Material Capacity Mean



Twenty-four percent reported that extended application was supported in the district budget to a great extent, 30% to a moderate extent, and 46% to a small extent ($M = 2.66$, $SD = 1.05$). Seventeen percent reported that district staffing was sufficient to support extended application to a great extent, 36% to a moderate extent, and 41% to a small extent ($M = 2.62$, $SD = .96$). Eleven percent reported that extended application

implementation was supported by grant funding to a great extent, 8% to a moderate extent, and 81% to a small extent ($M = 1.75$, $SD = 1.07$).

In summary, of the four district capacities, human capacity was the highest ($M = 3.32$). Respondents reported that district staff was knowledgeable about the state extended application graduation requirement and district leadership was committed to extended application implementation. Respondents reported that extended application was consistent with district goals for student achievement but that local school board members' understanding of the extended application graduation policy was low to moderate.

Organizational capacity ($M = 2.72$) was varied across districts in their support to build teacher capacity for extended application implementation through professional development and networking. Districts partnered with external organizations and created a shared understanding of extended application across the district to a small extent.

Districts' structural capacity ($M = 3.10$) was equally divided between great extent and small extent regarding the districts' adoption of local policies or requirements for extended application implementation, monitoring extended application in their school, and the coordination of extended application with other district standards-based school improvement efforts.

Districts' material capacity ($M = 2.72$) was low to moderate concerning allocation of resources to provide time for teachers to work together on extended application implementation, supporting extended application implementation in the district budget,

staffing to support extended application implementation, and providing curriculum and instructional resources to support extended application implementation.

Multiple Regression Analysis

Multiple regression (Pedhazur, 1997) was used to examine relationships among the district capacity variables and extended application implementation. In this analysis, the four district capacities were used as predictor variables and extended application implementation was the outcome variable. There were significant positive correlations ($p < .05$) between the four district capacity variables and reported extended application implementation, ranging from $r = .552$ to $.769$ (see Table 10). The largest correlations were between organizational and material capacity ($r = .769$) and between organizational and structural capacity ($r = .750$). The smallest ($r = .587$) was between human and material capacity.

There was a statistically significant relationship between the four district capacities and extended application implementation ($F [4, 83] = 30.77, p < .001$). The model accounted for 59.7% of the variance in the dependent variable extended application implementation (see Table 11). The standardized regression coefficients (b , SE , t , B , sr , p) for each predictor are shown at the bottom of Table 11. As can be seen in Table 11 from inspection of t -tests and p -values, human capacity, organizational capacity,

TABLE 10. Pearson's Correlation Coefficients of District Capacity and Extended Application Variables ($N=88$)

	Extended Application	Human Capacity	Organizational Capacity	Structural Capacity	Material Capacity
Extended Application	1.000				
Human Capacity	.680	1.000			
Organizational Capacity	.712	.709	1.000		
Structural Capacity	.683	.678	.750	1.000	
Material Capacity	.552	.587	.769	.711	1.000

and structural capacity were all statistically significant ($p < .02$). The unique relationship of material capacity with extended application implementation was not statistically significant ($p > .05$).

The semipartial correlations (sr) in Table 11, when squared show the size of the unique relationship between each predictor variable and extended application implementation after removing any variance it shares with the other predictors (Pedhazur, 1997). It can be seen that approximately 4% of the extended application implementation variance was uniquely associated with organizational capacity, 3.5% with human capacity, and 3% with structural capacity. In this analysis, material capacity ($sr = -0.109$) was not found to be a contributing factor.

TABLE 11. Overall Results for Regression Model Predicting Extended Application Implementation

Model Summary

R	R^2	adjusted R^2
0.773	0.597	0.578

ANOVA

Source	SS	df	MS	F	p
Regression	23.15	4	5.79	30.77	<.001
Residual	15.61	83	0.19		
Total	38.77	87			

Regression Coefficients for Model Predicting Extended Application Implementation

Variable	b	SE	t	B	sr	p
Intercept	1.198	0.252	4.748			<.001
Human Capacity	0.294	0.109	2.693	0.280	0.188	.009
Org. Capacity	0.292	0.100	2.935	0.385	0.204	.004
Structural Capacity	0.199	0.082	2.424	0.282	0.169	.018
Material Capacity	-0.083	0.087	-0.950	-0.109	-0.066	.345

Note: SE = standard error, sr = semi partial correlation

Implementation Barriers

Respondents were asked to what extent a list of factors were barriers to implementation of extended application in their districts. Barriers were measured on a 5-point rating scale in which 1 = not at all, 2 = to a small extent, 3 = to a moderate extent, 4 = to a great extent, 5 = to a very great extent. The means for question 16 a-i ranged from 1.73 to 3.26. Table 12 lists the means for barriers to implementation in descending order.

TABLE 12. Barriers to Implementation of Extended Application

<i>Barriers</i>	<i>N</i>	<i>M</i>	<i>SD</i>
The academic demands and accountability requirements of No Child Left Behind (NCLB)	85	3.26	1.24
Lack of professional development support from the state	85	3.25	1.17
Fiscal constraints	86	3.21	1.25
New graduation requirements (e.g. increased math and science, essential skill proficiency)	85	3.11	1.32
Lack of a common understanding of Extended Application	86	2.58	1.06
Lack of common performance criteria for assessment of Extended Application	84	2.52	1.18
Lack of buy-in from teachers	84	2.46	1.11
Extended Application requires a break from traditional or usual practices	86	2.37	1.05
Lack of buy-in from administrators	86	1.73	.79

As the table shows, the demands of No Child Left Behind and the lack of professional development support from the state were perceived as the greatest barriers to

implementation. Fiscal constraints and the new graduation requirements were close behind. A lack of a common understanding of extended application, the lack of common performance criteria, a lack of teacher buy-in, and the perception that extended application requires a break from traditional or usual practices ranked as moderate to low barriers. Most respondents (81%) indicated that lack of buy-in from administrators was not a barrier to implementation.

Ten respondents checked “other” and three individuals wrote in additional comments (in verbatim): lack of buy-in from students who are not personally invested; lack of understanding/support from colleges and some businesses; the new graduation requirements would be rated as a barrier to a small extent assuming that all-inclusive projects such as senior projects will satisfy different requirements (e.g. essential skills and extended application AND career-related learning standards).

Capacity Needs for Extended Application

Question 17 was an open-ended question: “What is your district’s greatest capacity need to support implementation of extended application in your high schools?” Of the 88 total survey respondents, 80% ($N = 70$) answered this question. All comments were coded and categorized under major themes (Strauss & Corbin, 1990). The frequency of responses was calculated under each category (Fink, 2003). Comments that included more than one theme were counted in more than one category. See Appendix G for all responses and Appendix H for comments grouped by themes and frequency. This section is organized by the major themes with a summary of responses.

Time

The need for time was identified by twenty-three respondents (33%) for the following purposes: professional development and training; for teachers to work together, collaborate, and plan; to align extended application with academic goals; program development to fit local needs; to educate the community; to implement extended application building and district-wide; and for release time to network with educators from other districts.

Financial Resources

Comments from 21 respondents (30%) cited the need for funding or financial resources. Some specified needing money for time, professional development, or FTE and are reflected in other categories too. Others addressed the need for “stable and adequate funding” and “committed funding at the state level”. Financial resources to assist teachers and “to provide increased opportunities for application of learning” were also mentioned. One of the respondents cautioned that “extended application will become a check box over time if not funded properly”. Another described the need for funding to support time for program development and delivery:

State paid time outside the school/day year for schools and community/business organizations to thoroughly discuss a partnership to deliver extended application and to develop systems features and support mechanisms for this to be delivered successfully. It impacts course catalogs, student schedules, attendance programs, policies on being off campus, release time, mentorships, record keeping, parent and student buy-in and communication, capacity studies, etc. None of these things can be addressed while school is going on. No funds are available for successful and meaningful implementation.

State-Level Guidance

Eighteen responses (26%) were grouped under the category of state-level guidance. Respondents needed more information from the state as well as clear guidelines and understanding of expectations. As one stated, they need support with “integration of this requirement with other state and federal mandates – how do we prioritize and support all school improvement requirements and efforts?” Also mentioned was the need for examples and models of implementation. Another suggested they needed “partnerships to deliver extend application and to develop the systems features and support mechanisms for this to be delivered successfully.”

Additional comments indicated that lack of time would result in compliance vs. commitment and suggested that extended application was viewed as “one more thing asked of teachers” or seen as an “add-on.” As one respondent explained:

This [extended application] gets lost in all the information about the diploma changes because it is hard for the public to understand. Moving from an experience for some to a common experience for all is a huge step, which requires integrating it into all the other initiatives and yet retaining the critical criteria to make extended application effective. It will be hard to get the commitment of teachers if time forces simple compliance and this will not lead to the high quality experience we want for all students.

Professional Development

Resource needs for professional development and training were identified by thirteen respondents (19%). Professional development needs included: opportunities for teachers to meet and collaborate to see how best to meet students’ needs; implementing extended application across the curriculum; district-level coaching of administrators;

networking with other districts, especially rural and small school districts with limited industry; and for teachers and administrators “regarding expectations and possibilities for implementation.” One respondent noted that professional development was a top priority and they “have initiated a district wide professional development once a quarter for all teachers to come together and work on all state and federal mandates.”

Staffing/FTE

Thirteen respondents (19%) indicated the need for staffing/FTE, including the need for project mentors, district coaches, senior seminar instructors, and coordinators to make community connections to support learning experiences outside of school. Others just said needed “staff” without specifying for what purpose.

Capacity Needs for the New Graduation Requirements

Question 18 asked for an open-ended response to the following: “The new Oregon Diploma, adopted in 2008, requires extended application and additional requirements (e.g. increased math and science, proficiency in essential skills). What support is needed from the state to help build district capacity for successful implementation of the new diploma?” Of the total survey respondents, 82% ($N = 72$) answered this question. All comments were coded and categorized under major themes (Strauss & Corbin, 1990). The frequency of responses was calculated under each category (Fink, 2003). Comments that included more than one theme were counted in more than one category. See

Appendix G for all responses and Appendix I for comments grouped by themes and frequency. This section is organized by the major themes with a summary of responses.

State-Level Guidance

The need for state-level guidance was noted by 28 respondents (39%). Two major sub themes emerged in this category: the need for clear expectations, particularly for math and science, and the need for models and examples. As one respondent commented “we need in-service time and someone who really understands all of the ramifications for the new diploma to give us an understandable explanation.”

Several respondents asked for clarity on what constitutes the Algebra I and above requirement and guidance on how districts can meet the math goal, especially for low-performing students. One respondent commented:

We need direction in how to implement math and science requirements. Especially math. Does this mean we simply teach Algebra I curriculum over two years? We have small staff and do not have the extra time to train our vocational teachers to teach math classes that might fulfill the requirement. I still wonder how “all” students will be able to perform at the levels desired. We will need help in these areas.

One respondent stated, “proficiency in essential skills is not clear...I am hesitant to do too much with it until it becomes clearer what the expectations are.” Another respondent asked for “more examples and professional development showing how to increase the rigor of extended applications” and one wanted “standardized expectations for ‘what counts’ as extended application.”

Models that specifically address small districts' needs was mentioned. One respondent noted the need for "information on best practices to succeed at implementation, instead of strictly the requirements. In a small district many staff are stretched to capacity and now have one or more issues to 'figure out'."

Another respondent suggested "the use of best practices by other districts as a resource for staff members who are struggling with change." One suggested how extended application and the new requirements could be integrated:

This is a much larger question, and there is ample conversation around the issue. In relation to the extended application work, the new "essential skills" can integrate and compliment the work nicely. Using technology, demonstrating global literacy, now largely undefined, could add a great deal of value to the extended application work while also providing manageable mechanism for implementation and assessment of student proficiency in the remaining essential skills (the remaining five). As those skills become clarified, how these skills enhance the extended application work is a valuable conversation to be having at the state and local levels.

Additionally, one respondent questioned the value of extended application as a graduation requirement in comparison to traditional academic requirements:

Very, very few support the career-related learning extended application as critical indicators of a more rigorous diploma. Cited continually in conversations about Oregon diploma requirements is that few, if any, states have career-related diploma requirements while all have focused on "raising the bar" through increased subject area requirements, specific core course requirements, and demonstration of proficiencies through some type of assessment. Why are we so married to the career-related requirements and extended application in Oregon?

Professional Development

There were 26 comments (36%) concerning the need for more support for professional development. The need for training on work sample scoring was identified

to “assure all use the state scoring guides in a consistent manner across all high schools.” One asked the state to “provide cost-effective ways to provide initial as well as ongoing, refresher training on the use of writing, speaking, and science inquiry scoring guides.”

Lack of targeted professional development funds was an issue for many. One noted that their Title IIA funding was used up and another said their Title funding for staff development was “frozen as a result of not making AYP.” Another mentioned the need for “continued training in how to build the graduation requirements into the electives” to award academic credit.

Local professional development opportunities are needed as they do not have funds to travel to participate in professional development opportunities across the state. One respondent commented “we only have four 7-12th grade teachers and having them gone at the same time is usually impossible.” One respondent suggested the following capacity-building strategy to deliver professional development:

The state should partner with districts and non-profit organizations that are addressing some of these areas to release teachers to share their expertise and delivery models with the state. These can be video taped and posted on an ODE implementation website. Also, schedule webinars several times a week on each of these elements of the diploma and allow teachers to log in and “self train” on their own. Then, at least with the stage set through the video, districts can provide time to get teachers together to talk about this...without additional funding for staff development.

Staffing/FTE

Staffing/FTE needs were identified by 18 respondents (25%). The need for highly qualified teachers (HQT) to meet federal accountability requirements, in both math and science, is an issue for some districts. One respondent commented “we are sweating

bullets trying to figure out how to add teachers to cover the math and science requirements. Implementation hasn't even been discussed." HQT is of special concern for small and rural districts "...in a small district/school high qualified/licensure issues become formidable." Another asked, "How will a small school compete for advanced math teachers with urban area schools who can pay higher?"

Several commented on the need for increased FTE to provide additional course offerings to meet the new requirements. As one put it "more funds to provide increased staff necessary to offer a comprehensive secondary education and meet the new requirements."

Financial Resources

Fifteen comments (21%) addressed the need for funding or financial support. Several comments asked for funding in general, some identified the need for money to support such things as additional classrooms or lab space. Comments included needing funding for "additional learning time and resources needed for all students to complete required course work and test" and "funding to support the additional systems that will need to be in place for those students who don't pass their OAKS testing." Some noted that without additional resources "electives are cut to provide academics and kids need electives to keep them in school."

The following comment pointed out several resource and capacity issues concerning implementation:

More thinking and answers from ODE regarding how we successfully raise standards for ALL students, with little or no additional resources. Resources

meaning: curriculum, instruction, staff development, time, etc. How do small rural schools meet all new diploma requirements when content specialists are hard to come by and opportunities for extended application are limited? How on-line cyber schools/charter schools or colleges offering high school & adult high school diplomas meet these standards in the same manner regular public schools are required to meet? Where is the buy-in and planning from teacher education institutions and private business partners so K-12 initiatives are understood, supported, and integrated with post-secondary outcome partners? I would like to see community college and four-year colleges/universities staffs actively involved in an “on-site”, regular basis, helping K-12 teachers with development of curriculum/instruction strategies research-based practice implementation, assessment of learning success, and building connections with K-12 partners. I would like the state Legislature, Board of Education, and ODE to think through and plan for the mandated requirements (e.g. do we have capacity to develop math/science curriculum and produce more math/science HQ teachers) before asking public schools to implement new requirements.

In summary, consistent, and overlapping themes emerged from the two qualitative capacity questions. Issues related to time, professional development, financial resources, staffing/FTE, and state-level guidance were mentioned most frequently. Time was the most frequent need mentioned for extended application while state-level guidance was needed most from the state to build district capacity for the new graduation requirements.

CHAPTER V

DISCUSSION

Oregon's state graduation policy, "...build a collection of evidence, or include evidence in existing collections, to demonstrate extended application" in Oregon Administrative Rule 581-022-1130, adopted by the State Board in 2002, has significant implications for local implementation and district capacity. Implementing extended application requires capacity for educators to collaborate, network, and for building teachers' skills. In addition, new graduation requirements adopted by the State Board in 2008 add to the complexity of local implementation and will likely increase district capacity needs. Currently, the state education department lacks information about local implementation practices and district capacity to support implementation of extended application and the new graduation requirements.

The purpose of this study was to examine how local school districts in Oregon have implemented the state extended application graduation policy through their existing capacity. The study explored the interrelationships of four capacity domains (human, organizational, structural, and material capacity) and extended application implementation. Further, implementation barriers were identified as well as district capacity needs to support implementation of extended application and the new graduation requirements.

This study used a non-experimental, descriptive research design and survey methodology. A self-administered web-based survey was developed to collect data and sent to curriculum administrators in all K-12 public school districts in Oregon. Study results are summarized and interpreted below following a discussion of study limitations.

Limitations of the Study

This study used a self-administered survey which has the potential for bias or distortions (Meltzoff, 1998) not detectable from survey data alone. The results of this study were based on the perceptions of the individuals who completed the survey. Without direct observation, the accuracy of responses lacked independent validation. Thus response bias is a threat to internal validity.

The unit of analysis was the school district though actual implementation of extended application takes place in schools. This study was an attempt to find out what role the district played in creating the conditions for implementation of this graduation requirement. District curriculum administrators were targeted though respondents included individuals with various job titles and multiple district responsibilities. Depending on who completed the survey, that individual may or may not have been the person most knowledgeable or aware of actual extended application implementation practices in their district's schools. Given the level of respondents' knowledge, results may not extend directly to schools or individuals.

Another potential liability to the accuracy of this self-report was the researcher's employment with the state Department of Education, an agency that holds authority over school districts. This association could have been perceived as a threat and may have impacted the candor of respondents. Participants may not have been completely truthful so as to disguise lack of implementation with the state agency. I tried to minimize this threat by assuring anonymity and confidentiality in the invitation letter. It is conceivable that respondents may have overstated the extent of extended application implementation in schools or the districts' support of state policy. Given this potential for bias, policymakers should be cautious that the implementation and capacity results could likely be less complete and less extensive than reported in this study.

Response rate and nonresponse bias (Huck, 2004) could also have influenced the findings and external validity of the study. Though steps were taken to promote a high return rate (Creswell, 2003) the response rate for this study was 50%. According to Rea and Parker (2005), a 50% response rate is satisfactory provided it is representative of the population.

Demographic data showed respondents were from districts in each geographic region of the state identified in the survey and further analysis showed that 81% of the counties in Oregon were represented. The responding districts were located in urban, suburban, and rural settings, with the majority from rural locales. Further analysis compared the participating district size by student enrollment with Oregon K-12 districts' enrollment ($N = 175$). The following comparison is based on data from Oregon Education Data Book 2006-2007 (Oregon Department of Education): less than 500

students, respondents 30%, Oregon 32%; between 500 and 3,000 students, respondents 50%, Oregon 42%; between 3,000 and 10,000 students, respondents 12%, Oregon 18%; and over 10,000 students, respondents 7%, Oregon 7%.

Nonresponse bias is another threat to validity (Huck, 2004). It is uncertain if individuals in the 50% of districts that did not participate would have responded differently. In addition to the nonparticipating districts, nonresponses included the twenty-five partially completed surveys that were eliminated from the study analysis. The partial respondents opened the survey and completed the demographic section only and left all of the remaining sections blank.

Reasons for nonresponses could have been that the individual did not feel knowledgeable enough about extended application to answer the questions, lacked interest or will, or perhaps did not want to admit their lack of implementation progress. Interestingly, two nonparticipants notified me that they did not know anything about extended application, which may be reflective other nonrespondents. Again, the response rate and potential nonresponse bias could have affected the findings. Implementation and district capacity could be less extensive than reported and the generalizability of the findings to all Oregon school districts may be limited.

Design and development of a new survey instrument poses another limitation in survey research. District capacity is complex and can be evaluated using a variety of indicators (Century, 1999). I chose to narrow my focus to a few critical indicators within each capacity domain to develop survey questions. The indicators were derived from the literature review. Perhaps the findings would have been different if other indicators had

been selected. Further, in trying to keep the survey to a reasonable length I limited the number of questions per indicator (Rea & Parker, 2005) and may have had too few to adequately measure capacity. Some threats to internal validity were reduced through content validation by an expert panel and estimating internal consistency of the survey instrument using Cronbach's alpha (Meltzoff, 1998).

It should be noted that implementation is influenced by many factors and capacity is only one measure. Multiple regression analysis showed that district capacity could account for 59.7% of the variance in extended application implementation; however, other factors were not measured such as district context and culture including, values, beliefs, and attitudes of the local community. These variables, unique to each school district, could have also influenced the extent of implementation and impact the results.

Neither the quality of implementation nor the accuracy of responses can be completely determined from this study. Observations of actual implementation practices in districts and schools would illuminate these findings. Interviews would have allowed a more in-depth look at some of the findings and triangulation of the data would have strengthened the results. Additionally, it would have been informative to survey high school staff and compare their perceptions of district support for implementation with those of the respondents.

Policy Implications

The results of this study provided insights into current extended application implementation practices and district capacity across the state. As reported by the district

respondents, implementation practices and progress varied across districts.

Implementation variability is not surprising as school districts determine how extended application is implemented locally. Local variability in implementation is expected and not necessarily undesirable (Elmore, 1983). Elmore (1983) says, "...our standard of success is the capacity of program participants to produce desired effects. If variability enhances the likelihood of program effectiveness, it is good; if it does not, it is bad" (p. 350). In this study, the unit of analysis was the school district, examining to what extent districts have created the conditions for successful implementation. Therefore the standard of success in this study, as defined by Elmore (1983), was the capacity of districts to support extended application in their schools.

Most of the districts' schools required the extended application components defined by the state, however, the one requirement least often included was "applied in new or non-routine situations." While it is promising that the other components are being required, this is a fundamental characteristic of extended application that largely defines the requirement in (OAR) 581-022-0102. Similarly, schools least often implemented extended application "outside of the school in the community" which suggests limited opportunity for students to apply their knowledge and skills in real word situations, another essential feature of this requirement. In addition, respondents identified the need for time and resources to make connections and extend learning into the community as a capacity need which supports the implementation findings.

It is not surprising that these particular components were found lacking as they are less adaptable within the existing traditional curriculum. Reforms that require a

fundamental shift in existing structures are sometimes made to fit existing practices rather than implemented as intended (Spillane et al., 2002). Interestingly, the notion that extended application requires a break from traditional practice was not perceived as a barrier by many respondents. These findings may indicate a superficial understanding of what is expected of extended application practice or perhaps reflects a minimum compliance attitude.

In some districts the scoring method for extended application was determined and carried out by individual teachers whereas in others it was prescribed by the district. The use of proficiency or sufficiency criteria to evaluate students' demonstration of extended application was lacking in some districts. Over 60% of the districts did little or no training of evaluators. These results point out that extended application performance assessment practices are limited and in some districts are not consistent with state requirements. State adopted rules (OAR 581-022-0102) require a collection of evidence to demonstrate extended application and the collection of evidence to be assessed against a standard or criteria. However, there are no defined state criteria, guidelines, or accountability requirements for student performance. The lack of common performance criteria for assessment was perceived as a barrier for some districts while for other respondents it was not.

As noted by Hargett and Fielding (2007), extended application is not included in the system-wide accountability processes that drive district priorities. Absent state accountability requirements for extended application, districts are likely not compelled to put in place valid and reliable assessments. On the other hand, Aschbacher (1991) found

that when states required and used reporting of the data, performance assessments were taken more seriously by districts and schools.

Additionally, the academic and accountability demands of No Child Left Behind and the new state graduation requirements were identified by respondents as their greatest barriers. Similarly, in Hargett and Fielding's (2007) study, local practitioners reported a tension created by competing policy priorities of the new academic requirements and extended application (and other career-related requirements) in an environment of diminishing resources and limited capacity.

It is apparent that the accountability demands of state and federal requirements have been and continue to be a critical driver of district priorities for school improvement. Given the choice between allocating resources toward meeting accountability requirements and implementing extended application with no accountability expectations, districts may tend to devalue the latter. Based on existing capacity, it is likely that the new graduation requirements may further limit the districts' ability to effectively support extended application implementation.

Half of the district administrators reported that schools were making great progress toward extended application implementation while the other half reported little to moderate progress. Their comments ranged on a continuum from "still at an elementary level" to "we're continuing to work on it" to "we are at the operational level." This is an important finding for policymakers as the extended application graduation requirement was first adopted by the State Board in 2002. Given this time frame, districts

have had time to make substantial progress and be fully implementing by 2008 when this survey was administered but have been slow to fully implement.

Results showed that district capacity was a predictor of extended application implementation and reveal that students' opportunity to meet the extended application graduation requirement is not equal across the state. Findings showed a positive relationship between district capacity and extended application implementation, as well as interrelationships among the four capacity domains: human, organizational, structural, and material capacity.

Human capacity refers to the knowledge, skills, and understanding of extended application among individuals in the district as well as the districts' commitment to carry out the extended application graduation policy. According to respondents, knowledge and commitment on the part of district staff and leadership were quite high and extended application was consistent with their districts' goals for student achievement. On the other hand, this was a self-reported survey and these results could have been overstated by the respondents. It is plausible that some may not have wanted to admit lack of knowledge or commitment on their part. Or possibly these individuals may think they are knowledgeable when in fact may only a superficial understanding of the policy intent and miss the deeper underlying principles (Spillane et al., 2002).

State-level guidance was found to be the greatest capacity need for implementation of extended application as well as the new graduation requirements. Districts wanted clear expectations and guidelines as well as models and concrete examples of what implementation may look like. Some comments indicated that

respondents tended to view the requirements through a traditional lens and need guidance in examining new or nontraditional approaches. Given the complexity of these new requirements, more targeted state support in this regard would help build the districts' human capacity to understand the intent and expectations of these requirements. As Spillane et al. (2002) pointed out, ambiguity at the policy level leaves implementation to the discretion of the implementers.

To further ascertain human capacity, the districts' actions were examined by proxy through the other three capacities. Results in organizational, structural, and material capacity showed some inconsistencies with the human capacity results.

Organizational capacity pertains to relationships among individuals within and outside of the district to support extended application implementation. Capacity building for extended application implementation through professional development, networking, and partnerships varied across the districts and was found to be lacking in many, yet these processes are needed for building human capacity (Bulkely et al., 2002; Fullan, 2001; Spillane, 2005; Spillane & Thompson, 1997). Implementing local performance assessments requires an investment in building teachers' skills (Falk et al., 2007; Khattari et al., 1997). Lack of professional development support from the state was also identified by respondents as an implementation barrier. Without this kind of capacity investment it is likely that many Oregon teachers lack the skills needed to successfully implement extended application.

Based on organizational capacity findings, most of the participating districts have not created a shared vision for extended application, and the moderate level of teacher

buy-in found in the human capacity results may in part reflect this. This is important to note as districts create the culture and conditions for developing a shared understanding that leads to change in practice (Fullan, 2001). Though most administrators indicated high commitment to extended application, they apparently did not mobilize networking and partnership opportunities (Spillane & Thompson, 1997) to build human capacity for extended application implementation. Lack of networking and partnerships limit teachers' opportunity to dialogue with colleagues and develop a shared understanding of extended application or to reflect on their own practices.

Extended application is not the traditional graduation requirement familiar to schools that is neither content specific nor based on credits and seat time. As such, districts and schools are challenged with understanding and making sense of this state policy. Districts need to engage in a sense-making process through social interactions such as professional development, learning communities, networking, and partnerships in order to develop the understanding and skills required for implementing extended application. Given the complex nature of extended application, opportunities for sense-making in the district is needed otherwise implementation will likely be perfunctory or compliance driven. Several of the respondents' comments affirmed that to be the case in their districts.

Structural capacity pertains to the functional elements of the system such as policies and procedures to support extended application implementation. While some districts may have local policies and procedures in place it appears from these results that many did not. The authority to award the high school diploma is granted in Oregon to

local school boards and the diploma must minimally meet state requirements in (OAR) 581-022-1130. Given that extended application is a state graduation requirement, it should be reflected in local district graduation policy and procedures. Nonetheless, local school board members were perceived to have a low to moderate understanding of the extended application graduation requirement. This may indicate that in many districts extended application does not have local board support. Waters and Marzano (2006) noted that in successful school districts superintendents gained school board support of the districts' goals. District leadership commitment to extended application implementation was reportedly great in most districts though it is not reflected in practice as noted in these capacity results.

Along the same lines, some districts monitored extended application implementation practices in schools while others apparently did not. Further, extended application scoring methods were often determined by the classroom teacher rather than the district. Whether scoring methods are district directed or decided by the school, districts should be concerned about whether or not assessment practices being used for this graduation requirement are valid and reliable (Messick, 1998).

Though many district administrators indicated that extended application was consistent with the districts' goals for student achievement in the human capacity results, the coordination of extended application implementation with other standards-based school improvement efforts is not apparent in many districts. Other researchers have found weak implementation in districts where reform ideas lacked integration (Fullan, 2001) or had competing demands and conflicting expectations (Elmore, 1986). Khattri et

al., 1997) suggested that lack of coordination among competing reforms caused uncertainty and confusion which resulted in teachers' unwillingness to invest in implementation.

Structural capacity results suggest that extended application implementation is not a district priority. Without a tangible commitment from the district, change in practice is not likely to happen. Lack of district priority was also noted by Hargett and Fielding (2007) in their regional implementation study. The academic and accountability demands of NCLB and the new graduation requirements, identified as high implementation barriers, may have been perceived as competing priorities and could be linked to limited structural capacity for extended application. According to Fullan (2001), "Teachers and others know enough now...not to take change seriously unless central administrators demonstrate through actions that they should" (p. 81). Extended application will not be taken seriously as a graduation requirement unless the district aligns it with other district priorities and establishes local policies and procedures to support implementation.

Material capacity relates to fiscal and material resources (Century, 1999; Spillane & Thompson, 1997) available to support extended application implementation in the district. Overall, material capacity was rated low to moderate which was consistent with the lack of organizational capacity for professional development, networking, and partnerships. Resources are needed to "buy time" for professional development and for teachers to work together.

Effective implementation of performance assessments requires time (Avery et al., 2003; Hargreaves, 2002; Khattri et al., 1997; Stiggins & Bridgeford, 1985). Falk et al.

(2007) found that the districts' investment of time in building teachers' capacity for performance assessments resulted in positive changes in teaching practices.

Respondents in this study also identified needs for time, funding, staffing, and professional development to build capacity for implementation of extended application and the new graduation requirements. Fiscal constraints were also identified as an implementation barrier. Lack of time for implementation, cautioned respondents, would result in compliance versus commitment of teachers and diminish the quality of implementation. The Oregon *Quality Education Commission Report* (2008) stated that time for staff collaboration and learning was a key factor in the schools showing evidence of continuous improvement. The report recommended an investment in strategies to increase collaboration time and professional development to implement Oregon's graduation requirements.

In the regression analysis, material capacity was not a unique predictor of extended application implementation. However, positive correlations were found between material capacity and the other three capacities. This indicates that material capacity alone is not enough, but that it is related to the other capacities in the process of implementation. As suggested by Spillane and Thompson (1997), financial resources were not necessarily the best determinant of district capacity. They found that successful reforms were carried out in both poor and affluent districts. What mattered more was how districts managed the resources they had in terms of creativity, partnering, and leveraging resources. As noted by Spillane and Thompson (1997), financial resources are needed for

implementation, but districts' human, organizational, and structural capacity are important in the use of those resources.

Recommendations

Based on the previous discussion and findings from this study, the following recommendations are made for state policymakers to address implementation of extended application and the new graduation requirements. The first two recommendations address current policies and district capacity building and the last recommendation addresses future policymaking with a focus on district capacity analysis.

Recommendation 1

The first recommendation is to reexamine the state's policy intent for the extended application graduation requirement and clarify expectations for districts. Results of this study show that since this policy was adopted in 2002, implementation progress is uneven across the state and is lacking in some districts. While respondents indicated that many of the required components of extended application were being implemented, some fundamentally key components that define extended application were lacking in many districts.

Structural capacity results indicated that tangible district commitment to extended application was not evidenced in local policies and procedures. Additionally, results found that the academic and accountability requirements of NCLB and the new graduation requirements were perceived as implementation barriers. Since there are no

state accountability expectations for the extended application graduation requirement these different policies may be viewed as competing priorities in some districts (Hargett & Fielding, 2007).

The state should consider how extended application can better align with the accountability expectations of the new graduation requirements and standards-based school improvement efforts. For example, could local performance assessments measure proficiency for both the essential skills and extended application? As one respondent commented "...the new essential skills can integrate [extended application] and compliment the work nicely...how these skills enhance the extended application work is a valuable conversation to be having at the state and local levels."

Another consideration may be for the state accountability system to require district reporting of extended application implementation or student performance. Aschbacher (1991) noted that performance assessments were taken more seriously when states required and used reporting of the data. The state would have to consider the policy intent of the extended application graduation requirement and any tradeoffs between personalization of extended application and common performance criteria associated with increased accountability.

Recommendation 2

Respondents indicated that state-level guidance and professional development support were high capacity needs for districts. Organizational capacity for professional

development, networking, and partnerships was uneven across districts. Further, lack of professional development support was also identified as an implementation barrier.

Increased state-level guidance would help to build the districts' human capacity (knowledge, understanding, and commitment). Two areas noted by respondents were the need for clear expectations regarding the requirements as well as models and concrete examples, particularly for extended application, mathematics, and credit for proficiency. Guidance from the state should clarify not only "what" is expected of districts but also the "why." According to Spillane et al., (2002), policymakers need to clearly communicate the intent and underlying principles of the state policy to build understanding and commitment.

Professional development support would help to build districts' organizational capacity (internal and external supports) resulting in increased human capacity (Hoyle et al., 2008; Goertz et al., 1995; Spillane & Thompson, 1997). This study's statistical model found organizational capacity to be the strongest predictor in relation to implementation of extended application which indicates that an investment in professional development would have beneficial results.

Based on these findings, the second recommendation is to develop a coherent statewide strategy for building district capacity to support implementation of extended application and the new graduation requirements. Both Massell (1998) and Goertz et al. (1995) recommended a strategic approach for capacity building that included the use of external partnerships and networks to provide professional development and technical

assistance. Fullan (2004) also suggested the use of collaborative networks and communities of practice to achieve “greater connectivity and cohesion” (p. 10).

A statewide capacity building strategy should broker and facilitate professional development, networking, and partnerships to build districts’ organizational capacity (Century, 1999; Goertz et al., 1995; Massell, 1998). A collaborative statewide strategy for professional development and technical assistance could leverage resources, technology, and partnerships across the state including Education Service Districts (ESDs) and other educational service providers, higher education, professional associations, business community, and others (Florian et al., 2000; Goertz et al., 1995; Massell, 1998).

Capacity building at the district level should encourage learning networks (Fullan, 2001; 2004; Spillane & Thompson, 1997) to help teachers and administrators develop their understanding and become knowledgeable about the state graduation requirements. Capacity building should include a mechanism for sharing best practices and exchanging ideas (Fullan, 2004) from Oregon schools and national research that would demonstrate successful implementation. Best practices could include how districts have arranged their schedules to accommodate the need for time and how districts have reallocated resources to support implementation of the graduation requirements.

As Fullan (2008) suggested, capacity building should be focused on results. To ensure quality and continuity, a statewide professional development strategy should be explicit in content and build upon the national staff development standards endorsed by the State Board (Oregon State Board of Education, 2008). Further, a statewide

capacity building strategy should include a detailed timeline, goals, and commitments to action from each partner. Capacity building strategies should be embedded in the districts' continuous improvement planning and evidence of goal attainment included in district and state accountability and reporting mechanisms.

Recommendation 3

This final recommendation is a longer-term strategy that goes beyond extended application. It is based on this study's finding regarding the interrelationships between capacities and policy implementation and the literature review. The third recommendation is to improve the state policy and implementation process with a focus on capacity analysis delivered through a systematic and interactive two-way communication mechanism that involves state-local partnerships (Barber, 2008; Conley, 2004, Fowler, 2004; Fullan, 2001; 2008; Sjogren, 1978). The goal is to strengthen state-local relationships to develop state policies that are more likely to be implemented successfully (Conley, 2004). A conceptual framework is described in the following paragraphs and illustrated in Figure 6 of Appendix J.

The process would allow for on-going, direct communication from the State Department of Education, Superintendent, and Board of Education to school districts and provide a vehicle for feedback during policy formulation and implementation. This two-way feedback loop would allow districts to interact with the state and more readily inform policy decision-making. The state would communicate the policy intent and

engage local districts in “sense-making” (Spillane et al., 2002) to build a shared understanding of the policy intent.

The communications systems design would use internet technology and other current media. As an example, it could utilize a strategy similar to the on-line communication strategy used by the Obama 2008 presidential campaign <http://www.barackobama.com/index.php>. This on-line strategy provides an operational example or proof of concept of a powerful mechanism that may be adaptable to the policy process. The communication mechanism may include such features as disseminating state policy intent through text, video, and inter-net links or other current social media; delivering messages via electronic mail (e-mail); operationalizing a two-way feedback loop; initiating and receiving targeted feedback quickly when needed; targeting messages to different stakeholders to get specific kinds of information needed or to obtain different perspectives; and utilizing an information management system for technology support and data processing.

Capacity analysis in this model would be more intentional and purposeful and used to inform policy decisions. In the policy formulation stage, a policy and capacity analysis questions (see Appendix J) would be used to address critical questions about the intended policy and to conduct an in-depth analysis of district capacity including: human capacity, organizational capacity, structural capacity, and material capacity.

This on-line communication system would not be a replacement for face-to-face contact with district stakeholders, rather it could be used in conjunction to maximize interactions. It should be noted that a widespread communication strategy with direct

reach to any and all stakeholders in the district (e.g. direct contact with teachers or local school board members) could potentially impact the dynamics of relationships or governance structures within the district.

Conclusions

Study results showed that extended application implementation progress is uneven across the state. Some districts have made little progress, some are making more progress, and some are reportedly making great strides. Results also showed that district capacity was a predictor of extended application implementation and that districts capacity is not sufficient to support implementation across the state.

Districts lacked the organizational, structural, and material capacity needed to build knowledge, understanding, and commitment (i.e. human capacity) to support implementation of extended application. Moreover the new graduation requirements were identified as a barrier to extended application and may likely impede implementation progress further. Districts indicated the need for increased state-level guidance, time for teachers and administrators to collaborate and learn, more professional development support, financial resources, and staffing to support implementation of extended application and the new requirements. A coherent and collaborative statewide strategy is needed to build district capacity to support all of the graduation requirements.

This study found interrelationships between the four district capacity domains and implementation. These findings have implications for the way capacity is viewed by educators and policymakers. While material capacity or financial resources are needed

for implementation, policymakers must recognize the importance of the districts' human, organizational, and structural capacity in the use of those resources. District capacity should be viewed holistically and comprehensively. Furthermore, capacity analysis should have a more intentional role in the policy process to increase the probability of successful implementation of state policy.

APPENDIX A
OREGON DIPLOMA REQUIREMENTS

Subject Areas	Graduating Class of 2009	Graduating Class of 2010	Graduating Class of 2012	Graduating Class of 2014
English/Language Arts	3	4	4	4
Mathematics	2	3	3	3 Algebra I & above
Science	2	2	3 Scientific Inquiry	3
Social Sciences	3	3	3	3
Physical Education	1	1	1	1
Health	1	1	1	1
Second Language				
The Arts	1	1	3	3
Career & Technical Ed				
Electives	9	9	6	6
Total Credits	22	24	24	24

Credit for Proficiency

Students can earn credits by successfully demonstrating knowledge and skills defined by standards that meet or exceed defined levels of performance.

Essential Skills

Beginning in 2012, students must demonstrate proficiency in identified Essential Skills (ES). These are 21st century skills needed for success in college, the workplace, and civic life. The State Board approved three assessment options for students to demonstrate Essential Skill proficiency: (1) state test, or (2) local assessments consistent with state criteria, or (3) approved national standardized test.

- Read and comprehend a variety of text
- Write clearly and accurately
- Listen actively and speak clearly and coherently
- Apply mathematics in a variety of settings
- Think critically and analytically
- Use technology to learn, live, and work
- Demonstrate civic and community engagement
- Demonstrate global literacy
- Demonstrate personal management and teamwork skills

Oregon Diploma Requirements Cont.

Personalized Learning Requirements

The following requirements personalize the diploma for each student and help prepare them for their post-high school goals:

Extended Application: Students apply and extend their knowledge in new and complex situations related to the student's personal and career interests and post-high school goals through critical thinking, problem solving, or inquiry in real world contexts.

Education Plan and Profile: Students develop an Education Plan and Profile to guide their learning and document academic achievement and progress toward their personal, career, and post-high school goals.

Career-Related Learning Experiences: Students participate in experiences that connect classroom learning with real life experiences in the workplace, community, and/or school relevant to their education plan.

APPENDIX B
STUDY SURVEY

1. DEMOGRAPHIC INFORMATION

1. How many students are in your district?

- a) Less than 500
- b) Between 500 and 3,000
- c) Between 3,000 and 10,000
- d) Over 10,000

2. How many high schools are in your district?

- a) 1
- b) 2-3
- c) 4 or more

3. Please check the region of the state in which your district is located.

- | | |
|---|---|
| <input type="checkbox"/> a) Central Oregon | <input type="checkbox"/> d) North Coast |
| <input type="checkbox"/> b) Eastern Oregon | <input type="checkbox"/> e) South Coast |
| <input type="checkbox"/> c) Southern Oregon | <input type="checkbox"/> f) Portland/Metro |
| | <input type="checkbox"/> g) Willamette Valley |

4. Which of the following best describes the type of setting in which your district resides?

- a) Urban
- b) Suburban
- c) Rural

5. What is your job title in the district?

2. EXTENDED APPLICATION IMPLEMENTATION

The next six questions pertain to implementation of the extended application graduation requirement in your district's high schools. Extended application is defined as "the application and extension of knowledge and skills in new and complex situations appropriate to the student's personal, academic, and/or career interests and post-high school goals."

For districts with multiple high schools, responses should reflect the most common practice across schools.

1. To what extent are the following assessment formats used for extended application in your district's high schools?

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) Projects (e.g., senior project, capstone project, culminating project)	<input type="checkbox"/>				
b) Exhibitions or demonstrations	<input type="checkbox"/>				
c) Portfolio or collections of evidence	<input type="checkbox"/>				
d) Classroom work samples	<input type="checkbox"/>				
e) Research paper	<input type="checkbox"/>				
f) Check off list	<input type="checkbox"/>				
g) Other	<input type="checkbox"/>				

Please specify:

2. To what extent are the following components required for extended application in your district's high schools? Extended application:

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) is based on personal and/or career interests	<input type="checkbox"/>				
b) is relevant to post high school goals	<input type="checkbox"/>				
c) includes integration of academic content standards	<input type="checkbox"/>				
d) includes integration of career-related learning standards	<input type="checkbox"/>				
e) is applied to new or non-routine situations	<input type="checkbox"/>				
f) requires student responsibility for managing their work	<input type="checkbox"/>				
g) requires student reflection of their learning	<input type="checkbox"/>				
h) other,	<input type="checkbox"/>				

Please specify:

3. To what extent do the following practices describe extended application implementation in your district's high schools? Extended application is implemented:

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) In academic courses	<input type="checkbox"/>				
b) In elective courses	<input type="checkbox"/>				
c) In specialized courses, such as a Senior Seminar or Advisory	<input type="checkbox"/>				
d) Outside of the school in the community	<input type="checkbox"/>				
e) Other,	<input type="checkbox"/>				

Please specify:

4. To what extent are the following practices used in evaluating extended application in your district's high schools?

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) Use of sufficiency criteria (i.e., enough evidence)	<input type="checkbox"/>				
b) Use of proficiency criteria (i.e., level of performance)	<input type="checkbox"/>				
c) Assessment scoring methods prescribed by the district	<input type="checkbox"/>				
d) Assessment scoring methods determined by the teacher	<input type="checkbox"/>				
e) Evaluated by an individual teacher	<input type="checkbox"/>				
f) Evaluated by a panel including members of the community	<input type="checkbox"/>				
g) Evaluated by a panel of peers	<input type="checkbox"/>				
h) Training evaluators to score student work	<input type="checkbox"/>				
i) Other,	<input type="checkbox"/>				

Please specify:

5. Please rate the progress of your district's high schools in implementing the extended application graduation requirement.

	Very little progress	Some progress	Moderate progress	A great deal of progress	Exemplary progress
Schools have made:	<input type="checkbox"/>				

Comment (optional):

6. For districts with multiple high schools only: To what extent are the responses in questions 1-5 common across all high schools?

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
Extent common across schools:	<input type="checkbox"/>				
Comment (optional):					

3. DISTRICT CAPACITY

The next four questions pertain to the district's capacity to support implementation of extended application. Capacity is defined as "the ability of the organization to fulfill the functions needed to implement and sustain a change initiative successfully."

Please rate the extent to which the following capacity elements are implemented in your district.

1. **HUMAN CAPACITY:** Refers to the knowledge, understanding, and commitment of individuals in the district. In your district, to what extent:

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) Is district staff knowledgeable about the state requirements for extended application?	<input type="checkbox"/>				
b) Is high school staff receptive to extended application?	<input type="checkbox"/>				
c) Do local school board members understand the extended application graduation requirement?	<input type="checkbox"/>				
d) Is extended application consistent with the district's goals for student achievement?	<input type="checkbox"/>				
e) Is district leadership committed to extended application implementation?	<input type="checkbox"/>				

2. **ORGANIZATIONAL CAPACITY:** Refers to relationships among individuals both within the district and with individuals outside the district to support implementation (i.e., collaboration, networking, partnerships, culture). In your district, to what extent:

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) Have teachers received professional development to build their capacity for extended application implementation?	<input type="checkbox"/>				
b) Do teachers have the opportunity to network with others to learn about and share extended	<input type="checkbox"/>				

application practices?

- | | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| c) | Has the district partnered with external organizations for support with extended application implementation? | <input type="checkbox"/> |
| d) | Has the district created a shared understanding of the extended application across the district? | <input type="checkbox"/> |

3. STRUCTURAL CAPACITY: Refers to the functional elements of the system such as district policies, procedures, and practices to support implementation. In your district, to what extent:

- | | Not at all | Small extent | Moderate extent | Great extent | Very great extent | |
|----|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) | Has the district adopted local policies or requirements for extended application implementation? | <input type="checkbox"/> |
| b) | Is extended application implementation coordinated with other district standards-based school improvement efforts? | <input type="checkbox"/> |
| c) | Does the district monitor extended application implementation practices in schools? | <input type="checkbox"/> |
| d) | Is there a recognition of students' completion of extended application? | <input type="checkbox"/> |

4. MATERIAL CAPACITY: Refers to the fiscal and material resources available to support implementation in the district. In your district, to what extent:

- | | Not at all | Small extent | Moderate extent | Great extent | Very great extent | |
|----|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) | Are resources allocated to provide time for teachers to work together on extended application implementation? | <input type="checkbox"/> |
| b) | Is current district staffing sufficient to support extended application implementation? | <input type="checkbox"/> |
| c) | Does the district provide curriculum and instructional resources for extended application implementation? | <input type="checkbox"/> |
| d) | Is extended application implementation supported in the district budget? | <input type="checkbox"/> |
| e) | Is extended application implementation supported by grant funding? | <input type="checkbox"/> |

4. BARRIERS AND CAPACITY NEEDS

The last three questions pertain to barriers and district capacity needs to support implementation of extended application and the new graduation requirements adopted by the State Board in 2008.

1. To what extent are the following factors perceived as barriers to implementation of extended application in your district?

	Not at all	Small extent	Moderate extent	Great extent	Very great extent
a) Lack of a common understanding of extended application.	<input type="checkbox"/>				
b) Lack of buy-in from administrators.	<input type="checkbox"/>				
c) Lack of buy-in from teachers.	<input type="checkbox"/>				
d) Extended application requires a break from traditional or usual practices.	<input type="checkbox"/>				
e) Lack of common performance criteria for assessment of extended application.	<input type="checkbox"/>				
f) Lack of professional development support from the state.	<input type="checkbox"/>				
g) Fiscal constraints.	<input type="checkbox"/>				
h) The academic demands and accountability requirements of No Child Left Behind (NCLB).	<input type="checkbox"/>				
i) New graduation requirements (e.g., increased math and science, essential skill proficiency).	<input type="checkbox"/>				
j) Other,	<input type="checkbox"/>				

Please specify:

2. What is your district's greatest capacity need to support implementation of extended application in your high schools?
3. The new Oregon Diploma, adopted in 2008, requires extended application and additional requirements (e.g., increased math and science, proficiency in essential skills). What support is needed from the state to help build district capacity for successful implementation of the new diploma?

APPENDIX C

CAPACITY FRAMEWORK FOR SURVEY DEVELOPMENT

Demographic Information	Survey Questions for Demographics
	<ol style="list-style-type: none"> 1. How many students are in your district? 2. How many high schools are in your district? 3. Please check the region of the state in which your district is located. 4. Which of the following best describes the type of setting in which your district resides? 5. What is your job title in the district?
Research Question	Survey Questions for Existing Implementation Practices
<p>A. Extended Application Practices</p> <p><i>Purpose:</i> To study local implementation of the state policy extended application graduation requirement.</p> <p>Research Question: 1. What practices are being used to implement the extended application graduation requirement in Oregon school districts?</p>	<ol style="list-style-type: none"> 6. To what extent are the following assessment formats used for extended application implementation in your district's high schools? <ol style="list-style-type: none"> 6a) Projects (e.g. senior , capstone, or culminating projects) 6b) Exhibitions or demonstrations 6c) Portfolio or collections of evidence 6d) Classroom work samples 6e) Research paper 6f) Check off list 6g) Other, please specify: 7. To what extent are the following components required for extended application in your district's high schools? extended application: <ol style="list-style-type: none"> 7a) is based on personal and/or career interests. 7b) is relevant to post-high school goals. 7c) includes integration of academic content 7d) includes integration of career-related learning standards 7e) is applied to new or non-routine situations 7f) requires student responsibility for managing their work 7g) requires student reflection on learning and their goals 7h) other, please specify 8. To what extent do the following practices describe extended application implementation in your district's high schools? Extended application is implemented: <ol style="list-style-type: none"> 8a) in academic courses

	<p>8b) in elective courses</p> <p>8c) in specialized classes, such as a Senior Seminar or Advisory</p> <p>8d) outside of the school in the community</p> <p>8e) other, please specify:</p> <p>9. To what extent are the following practices used in evaluating Extended Application in your district's high schools?</p> <p>9a) use of sufficiency criteria (i.e. enough evidence)</p> <p>9b) use of proficiency criteria (i.e. level of performance)</p> <p>9c) assessment scoring methods prescribed by the district</p> <p>9d) assessment scoring methods determined by the teacher</p> <p>9e) evaluated by an individual teacher</p> <p>9f) evaluated by a pane including members of the community</p> <p>9g) training evaluators t in scoring student work</p> <p>9h) Other, please specify:</p> <p>10. Please rate the progress your district's high schools have made implementing the extended application graduation requirement.</p> <p>11. For districts with multiple high schools only: to what extent are the responses in questions 1-5 common across all high schools?</p>	
Research Question	District Capacity	Survey Questions for Existing Capacity
<p>B. Existing Capacity</p> <p>Purpose: To study district response to extended application through their existing capacities.</p> <p>Research Questions:</p> <p>2. What are the interrelationships among the four district capacity domains:</p>	<p>Human Capacity</p> <p>Refers to the knowledge, understanding, and commitment of individuals, along with the will to implement.</p> <p>Key Indicators</p> <ul style="list-style-type: none"> ▪ Knowledge, understanding, commitment 	<p>12. In your district, to what extent:</p> <p>12a) is district staff knowledgeable about the state requirements for extended application?</p> <p>12b) is high school staff receptive to extended application?</p> <p>12c) do local school board members understand the extended application requirement?</p> <p>12d) is extended application consistent with the district's goals for student achievement?</p>

<p>a. Human capacity b. Organizational capacity c. Structural capacity d. Material capacity</p>		<p>12d) is district leadership committed to extended application implementation?</p>
<p>3. What are the relationships between district capacities and extended application implementation?</p>	<p>Organizational Capacity</p> <p>Refers to the relationships among individuals both within the district and with individuals outside of the district to support implementation</p> <p>Key Indicators</p> <ul style="list-style-type: none"> ▪ Internal and external supports (partnerships, networking, collaboration, district culture) 	<p>13. In your district, to what extent:</p> <p>13a) have teachers received professional development to build their capacity for extended application implementation? 13b) do teachers have the opportunity to network with others to learn about extended application practices? 13c) has the district partnered with external organizations for support extended application implementation? 13d) has the district created a shared understanding of extended application across the district?</p>
	<p>Structural Capacity</p> <p>Refers to the functional elements of the system such as policies, procedures practices to support implementation.</p> <p>Key Indicators</p> <ul style="list-style-type: none"> ▪ District policy and procedures 	<p>14. In your district, to what extent:</p> <p>14a) has the district adopted local policies or requirements that support extended application implementation? 14b) is extended application implementation coordinated with other district standards-based school improvement efforts? 14c) does the district monitor extended application implementation practices in schools? 15d) is there a recognition of students' completion of extended application?</p>

	<p>Material Capacity</p> <p>Refers to the fiscal and material resources available to the system to support implementation.</p> <p>Key Indicators Allocation of resources (time, staff, materials)</p>	<p>15. In your district, to what extent:</p> <p>15a) are resources allocated to provide time for teachers to work together on extended application implementation?</p> <p>15b) is current district staffing sufficient to support extended application implementation?</p> <p>15c) does the district provide curriculum and instructional resources for extended application implementation?</p> <p>15d) is extended application implementation supported in the district budget?</p> <p>15e) is extended application implementation supported by grant funding?</p>
<p>Research Question</p>	<p>Survey Questions for Capacity Needs</p>	
<p>C. Barriers and Capacity Needs</p> <p>Purpose: Identify barriers to implementation and capacity needs and ascertain districts' capacity to adapt to new graduation requirements.</p> <p>Research Question: 4. What are the capacity needs of districts to implement extended application and adapt to new graduation requirements?</p>	<p>16. To what extent are the following factors perceived as barriers to implementation of extended application in your district?</p> <p>16a) Lack of a common understanding of extended application.</p> <p>16b) Lack of buy-in from administrator.</p> <p>16c) Lack of buy-in from teachers.</p> <p>16d) Extended application requires a break from traditional or usual practices.</p> <p>16e) Lack of common performance criteria for assessment of extended application.</p> <p>16f) Lack of professional development support from the state.</p> <p>16g) Fiscal constraints.</p> <p>16h) The academic demands and accountability requirements of NCLB.</p> <p>16i) New graduation requirements (e.g. increased math and science, essential skills proficiency).</p> <p>16j) Other</p>	

	<p>17. What is your district's greatest capacity need to support implementation of extended application in your high schools?</p> <p>18. The new Oregon Diploma, adopted in 2008, required extended application and additional requirements (e.g. increased math and science, proficiency in essential skills). What support is needed from the state to help build district capacity for successful implementation of the new diploma?</p>
--	---

APPENDIX D

SURVEY INVITATION LETTER

September 15, 2008

Dear

You are invited, as a curriculum administrator in your school district, to complete an on-line survey as part of a statewide research study. The purpose of the study is to examine current capacity and identify capacity needs of districts as they support schools in the implementation of the Extended Application and new state graduation requirements (e.g. increased math and science, essential skills).

Participation is voluntary, but very important to the formation and understanding of state policy and local implementation. I am conducting this research for my doctoral dissertation, however, it will inform state policy and capacity-building efforts. As a further outcome of this study, I will develop a capacity analysis tool intended to enhance state policy decision-making.

The survey should take no more than 10-15 minutes of your time. Responses will be completely anonymous; your name will not appear anywhere on the survey. Survey data will be used only for research purposes by the researcher. All data will be kept secured at the researcher's home and destroyed after data analysis is completed. Personal identification will be computer encrypted to protect respondents' identity. Participation poses no risk to you and you may withdraw at any time. Completing the survey constitutes your consent to participate.

Keep this letter for your records. You may contact me at anytime with questions about this research at 503-947-5736; levy-uoregon.edu@comcast.net. Results of this study will be made available upon request. My dissertation advisor, Dr. Joe Stevens, at the University of Oregon, is also available for questions at 541-346-2445; stevensj@uoregon.edu. If you have questions regarding your rights as a research subject, please contact the Office for Protection of Human Subjects at the University of Oregon, 541-346-2510. This Office oversees the review of the research to protect your rights and is not involved with this study.

I invite you to access the survey by clicking on this website

http://www.surveymonkey.com/s.aspx?sm=EbQ7MxeoiV7s3VJCKXy_2f9fxNlCaLLujRGFh2IT_2beT2g_3d. Please complete the survey by September 26, 2008.

Thank you for your time and contribution to this study.

Theresa Levy

Doctoral Candidate, Department of Educational Leadership University of Oregon

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

<http://www.surveymonkey.com/optout.aspx>

APPENDIX E

LETTER OF SUPPORT FOR SURVEY PARTICIPATION

**CONFEDERATION OF OREGON SCHOOL ADMINISTRATORS**

707 13TH STREET SE, SUITE 100, SALEM, OREGON 97301
TELEPHONE (503) 581-3141
FAX (503) 581 9840

Dear Colleagues,

I am writing this letter in support of the statewide District Capacity Study and encourage you to complete the research survey.

The focus of this study is on district-level capacity to support implementation of Oregon's new graduation requirements. This research will provide useful data and analysis of current capacity and the capacity needs of districts to support successful implementation. This is valuable information for the State Board, the Department of Education, as well as for district leaders across the state.

Please join me in support of this timely and practical research project by participating in the statewide survey.

Thank you,

Kent Hunsaker
Executive Director

KH/jf

APPENDIX F

INITIAL SURVEY NOTIFICATION LETTER

September 9, 2008

Dear

I am conducting a statewide study on district capacity and will be inviting you by e-mail to complete an on-line survey in a few days. The purpose of the study is to examine current capacity and identify capacity needs of districts as they support implementation of the extended application and new state graduation requirements.

This research is part of my dissertation as a doctoral student at the University of Oregon but will inform state policy and capacity-building efforts. Please find attached a letter of support from Kent Hunsaker, Executive Director of COSA.

“This is valuable information for the State Board, the Department of Education, as well as for district leaders across the state. Please join me in support of this timely and practical research project by participating in the statewide survey.” *Kent Hunsaker*

Watch for an e-mail titled “District Capacity Study” with an invitation to complete the survey. You can contact me at 503-947-5736; levy-uoregon.edu@comcast.net if you have any questions.

Thank you in advance for your participation.

Regards,

Theresa Levy

Doctoral Candidate, Department of Educational Leadership
University of Oregon

APPENDIX G

COMMENTS TO QUALITATIVE SURVEY QUESTIONS

Respondents' Comments to Survey Question 17

The following bullets are the respondents' comments to the survey question: What is your district's greatest capacity need to support implementation of Extended Application in your high schools?

Respondents Comments

- Time to implement.
- Adequate Assessment and clear guidelines from ODE.
- Longer school year. Another thing required.
- Time for training in and application of the district senior project and additional staff.
- None needed.
- Money and staff development opportunities.
- Teacher/mentor who understands the "big picture" of what extended application is about and the relationship to Ed. Plan and Profile. Most of the direction comes from administration.
- Time, transportation, support from ODE and ESD, and integration of this requirement with other state and federal mandates - how do we prioritize and support all school improvement requirements and efforts?
- Professional development for teachers so they can implement this across the curriculum.
- Professional Development time to have teachers meet and collaborate to see how best they can serve their student's needs.
- I believe our high schools have the ability to support implementation and are doing many of the things required. But it has not been clearly communicated with staff or administrators, and it is viewed as one more thing asked of teachers but not clearly defined.
- As always, time and money. The teachers are stretched and cuts have taken more time away from them as their classes grow. Extended application will become a check box over time if not funded properly.
- Time to work together on work sample elements and elective courses that link content with essential skills.
- Flexibility in the staff and the creativity of projects by the students.
- The same issues that plagued small schools with CAM plague them today. 1. limited ability to partner with recourses outside the school. 2. The priority for professional

development is placed on ELL, Reading and Math; there is not enough time to complete that. This passed summer, the district paid for almost 100% of the staff to attend a week long training session in ELD and SIOP. During the year there are 3 other in-service days; those will be spent discussing ELL, Reading, Writing, Math and Science data. 3. Several years ago, this district implemented a thorough Extended Application Program (then called CAM). It is currently monitored by a 1/2 time vice-principal that mentors the teachers on the go, class by class during advisory period. The advisory teachers in turn monitor the students. It is an extremely difficult task. The board recently changed the name of the program from CAM to extend ended Application in our graduation requirements policy to comply with the new Oregon Diploma Requirements.

- Time to develop the program to fit the local needs and to educate the community about how the expectations have been increased.
- Continued clerical support to track student progress, keep parents informed and keep students up to date on their needs.
- Currently, training and professional plan time.
- The financial resources and FTE to make it happen.
- Staff development and time to implement building and district wide. Currently only our senior seminar teachers are active in implementation and planning. However, our entire high school staff is informed and moving in a positive direction.
- We have implemented EA as a diploma requirement since 2007.
- State paid time outside the school day/year for schools and community/business organizations to thoroughly discuss a partnership to deliver Extended Application and to develop the systems features and support mechanisms for this to be delivered successfully. It impacts course catalogs, student schedules, attendance programs, policies on being off campus, release time, mentorship's, record-keeping, parent and student buy-in and communication, capacity studies, etc. None of these things can be addressed while school is going on. No funds are available for successful and meaningful implementation.
- Committed funding at the state level.
- Financial Resources.
- Funding for staffing.
- We need to know more about Extended Applications and how they can be integrated into our courses.
- Completing 3 years of math starting at the Algebra! Level will be difficult for many students.
- Time for staff to work together to plan consistent evaluation criteria along with other diploma goals. With only 151 student days and 178 staff days we are developing strategies to make the best use of our time.
- Time.
- Rationale and staff development.

- We have initiated district wide professional development once a quarter for all teachers to come together and work on all state and federal mandates. Professional development is specified as one of the district's top priorities.
- Staffing.
- A much more clear understanding of the expectations-perhaps models upon which we can build.
- Consistency from the state- level what we have alone so we can see the full benefit of an outstanding program that we are working on.
- Staffing.
- Money.
- Having the resources to assist the teachers. Need money for more training at the state level.
- Time and Personnel.
- More fiscal support to provide increased opportunities for application of learning; improved technology, CTE teachers and programs, senior seminar instructors, and guide at the side/sage on the stage for capstone products.
- Stable and adequate funding, along with the cessation and reversal of unfunded legislative and policy mandates that strain a small district's personnel and fiscal capacity with accountability and reporting requirements. For example, our high school faculty pursued a collaborative process that identified ALL of the CRLS and Extended Application requirements embedded in the curriculum and community service graduation requirements that were already in place before implementation.
- We have adjusted our mode of delivery (to be more effort intensive in the realm of tracking and record keeping, to meet state requirements), but, as far as the skills and activities themselves, & “we were already doing that”.
- This gets lost in all the information about the Diploma changes because it is hard for the public to understand. Moving from an experience for some to a common experience for all is a huge step, which requires integrating it into all the other initiatives and yet retaining the critical criteria to make extended application effective. It will be hard to get the commitment of teachers if time forces simple compliance and this will not lead to the high quality experience we want for all students.
- Time & Money.
- Must be relevant. Currently seen as an add-on, remake of the 1970's competencies-- been there, done that.
- Somebody (ODE or ESD personnel) needs to go to the schools and prep people for this, suggest some methods and alternatives in meeting the requirements. When we survey staff for their in-service and training needs, this is not on their radar.
- Time and resources.
- Unsure of question.
- Staffing and money.
- More information, professional development.
- Developing local business connections and mentors for the students.

- Professional Development, Fiscal Resources, Time.
- In a small rural community there are limited community resources. Limited job shadow opportunities, limited career related experiences that would culminate with EA activities.
- We have been doing this for the last two years. We are becoming better at the process and have incorporated students, teachers, and parents in the process.
- Teacher and administrator time to make the experience valuable and aligned with academic goals.
- District level coaching of administrators.
- Funding.
- Professional development for administrators and teachers regarding expectations and possibilities for implementation.
- time and professional development.
- Additional staffing.
- More training.
- Time in the week. We have a four day school week. Teachers are stretched to fit all the new requirements into the week as it is.
- More funds for a coordinator that could help to connect w/ the community.
- Continue to work with CCC & Weinima program.
- We've actually been doing this for years. This is just a modification to our previous efforts, certainly nothing brand new.
- Dollars and time.
- Professional Development, a model of implementation, and follow through from the state.
- Time & Money.
- Network with other districts, especially rural and small school districts with limited industry and financial resources to release teachers for this purpose.
- This district has been working with the Extended Application principles through the Senior Seminar Experience, which is a long-standing graduation requirement. At this time, the practices are firmly in place.
- Time, funding and training.

Respondents' Comments to Survey Question 18

The following bullets are the respondents' comments to survey question: The new Oregon Diploma, adopted in 2008, requires Extended Application and additional requirements (e.g. increased math and science, proficiency in essential skills). What support is needed from the state to help build district capacity for successful implementation of the new diploma?

Respondents' Comments

- Money, more math teachers, technology enhancements, lab remodel.
- Clear guidelines from ODE and the funding to hire HQ staff.
- They need to fund the extra teachers we need to complete the new standard, as well as all the other unfunded mandates.
- More money for space and staff.
- Additional dollars to hire staff for mathematics and science courses.
- Finding ways for the students that do not understand math (just like those who cannot spell) to get the higher math requirement. We would prefer 4 years of math with no level specified, just like English.
- Money and local staff development--If the SD is in Salem we have to pay for subs, travel, food, lodging etc. We just don't have the money. We need the ESDs to help pick up this piece.
- Provide training to teachers on instructional practices that will ensure that students are successful. Use of best practices by other districts as a resource for staff members who are struggling with change.
- More thinking and answers from ODE regarding how we successfully raise standards for ALL students, with little or no additional resources. Resources meaning: curriculum, instruction, staff development, time, etc. How do small rural schools meet all new diploma requirements when content specialists are hard to come by and opportunities for extended applications are limited? How on-line cyber schools/charter schools or colleges offering high school & adult high school diplomas meet these standards in the same manner regular public schools are required to meet? Where is the buy-in and planning from teacher education institutions and private business partners so K-12 initiatives are understood, supported, and integrated with post-secondary outcome partners? I would like to see community college and four-year colleges/universities staffs actively involved in an "on-site", regular basis, helping K-12 teachers with development of curriculum/instruction strategies, research-based practice implementation, assessment of learning success, and building connections with K-12 partners. I would like the State legislature, Board of Education, and ODE to think-through and plan for the mandated requirements (e.g. do we have capacity to develop math/science curriculum and produce more

math/science HQ teachers) before asking public schools to implement new requirements? I could go on... Thanks for asking!

- Professional development and funding for additional FTE to support the new requirements.
- Staff development /School Improvement money that goes DIRECTLY to the high school and not controlled at the District level specific to implementation and continuation of the Extended Application.
- We are taking care of requirements for math and science, but proficiency in essential skills is not clear as well as the rest of Extended Applications. . . it seems to be somewhat what we have had before with Career Related standards and CIM, but in a somewhat different format. I am hesitant to do too much with it until it becomes clearer what the expectations are.
- Resources. We are in a conundrum. In order to provide properly for the students, electives are cut to provide academics and kids need electives to keep them in school. Continued training in how to build the graduation requirements into the electives is crucial as the need to allow teachers not highly qualified in the academic area to grant credit. Credit for proficiency is a help, but a slow way to go when trying to convince academic teachers and administrators that the credit is as valuable as in the academic classroom.
- Time is our best resource to link the extended application elements in with the regular cis elements to push kids farther in their understanding of career related concepts.
- Funding to support the additional systems that will need to be in place for those student who don't pass their OAKS testing
- The state is completely aware of the current shortage of math teachers. We will continue to work toward keeping pace with AYP requirements. If we can do that then we will worry about the new Math Graduation requirement. Certainly we will institute the new classes necessary to meet the requirement; however, the emphasis will continue to be on making sure our students learn to speak English.
- Television commercials communicating the new Oregon Diploma requirements - our folks don't always read the paper or listen to the radio for news. Most of them rely on TV as their source of information.
- Flexibility with title of math classes a template/guidance on how districts can meet the math goal.
- This requirement may be more about adding fte in order to provide more course offerings.
- Financial resources in a declining economy and clearer objectives. It seems like the old grad requirement with a new spin and lots of general wording left for districts to make decisions again.
- Funding for teachers and collaboration between districts to see what is working and what is not.
- From our School Board to our students, there is support and a vested interest in the increased subject-area diploma requirements and demonstrated proficiencies in

essential skills. These are accepted as critical indicators of increased rigor in a high school diploma. All accept the critical need of an education plan and planning for all students. However, very, very few support the CRLS, CRLEs, and EA as critical indicators of a more rigorous diploma. Cited continually in conversations about Oregon diploma requirements is that few, if any, states have career-related diploma requirements while all have focused on "raising the bar"; through increased subject-area requirements, specific core course requirements, and demonstration of proficiencies through some type of assessment. Why are we so married to the CRLS, CRLEs, and EA in Oregon?

- The state should partner with districts and non-profit organizations that are addressing some of these areas to release teachers to share their expertise and delivery models with the state. These can be video taped and posted on an ODE implementation website. Also, schedule webinars several times a week on each of these elements of the diploma and allow teachers to log in and "self train" on their own. Then, at least with the stage set through the video, districts can provide the time to get teachers together to talk about this....with additional funding for staff development. Our staff development funds (Title II-A) were frozen as a result of not making AYP. We are now not able to support implementation conversations out of our general fund OR Title funds.
- Funding for additional learning time and resources needed for all students to complete required coursework and tests.
- Math & science teachers and support for small charter, rural schools to hire additional staff to make this a reality.
- Funding, funding, funding.
- Continued SIF money, sharing of successful models that are being developed
- We need in-service time and someone who really understands all of the ramifications for the new diploma to give us an understandable explanation.
- What is the alternative for special needs students other than having a modified diploma?
- Professional development that is local - we are 3- 5 hours from most of the sites where training is offered. We only have 4 7-12 teachers and having them all gone at the same time is usually impossible.
- Our standards were already more stringent, so an increase in requirements from the state doesn't require extra locally.
- Money for math specialists.
- Funding to allow districts to offer staff development days outside of the required instructional time.
- Staffing.
- There needs to be a more fair method to figure small (high) school adjustment...as a district that is declining in enrollment and is now under 350 students, it is increasingly more difficult to add new requirements. This is especially true in light of

HQT. What would help is to have a small school adjustment for all high schools under 350 students; not just for schools who have always been under 350 students.

- Increased funding for professional development. We are currently using all of our Title 11A funds in this area. Maybe we can stop testing all 10th grade students on the PSAT and funnel that money back to the LEA's from the ESD?
- We will need an additional math teacher beginning 2009-2010 the state has not provided additional funding for staff.
- Money, professional development opportunities.
- Increased support in work sample scoring. Increased support for technology.
- HQ personnel to work in falls City and to begin to fund k-12 small schools on a flat or sliding scale with a floor instead of using child count statistics.
- Improved certification flexibility that allows for CTE and HQ math/science combinations. Allowances for Algebra 1 math to be taught over two years instead of being restricted to one year for those students would meet and exceed in all other areas but who struggle in higher level math.
- (see above) Funding. The increased requirements increases need for staffing; in a small district/school, highly qualified / licensure issues become formidable.
- Communities and school cultures will comply, but will not shift core beliefs about what high school is for unless a much more grassroots change happens. That can only emerge from the teacher level up, and it may be too late to allow that to grow since the timelines are so tight. I guess I'm asking for the impossible: allowing districts pursuing adaptive change to do that work. But there is little patience for that in the political system and the economy is conspiring to choke our resources right as this challenge is before us. Clearly I am not optimistic and have no answer to offer.
- Model of Implementation Standardize the requirements, process, record keeping
- It (EA) actually started with state board requirements in 2003. Most people in the field are directing all of the energy toward the increased credit requirements and higher level of math, science, and language arts. Your question is not clear. Do you mean successful Extended Application implementation or the other components of the diploma?
- We are sweating bullets trying to figure out how to add teachers to cover the math and science requirements. Implementation hasn't even been discussed.
- Some information on best practices to succeed at implementation, instead of strictly requirements. In a small district many staff are stretched to capacity and now have one more "issue to figure out".
- Professional development at zero cost to district.
- We lack sufficient lab space to offer 3 full years of lab science. Our only choice will be to offer some coursework that has extensive outside lab work...which costs money and resources that we don't have.
- Additional resources for staffing, potential space needs.
- More help with mathematics. Getting them all through Algebra 2 will be nearly impossible.

- Professional Development, Time, Resources.
- Will this be another unfunded mandate meaning will I have to cut elective programs to meet this requirement? How will a small school compete for advanced math teachers with urban area schools who can pay higher?
- We need direction on how to implement the math and science requirements. Especially math. Does this mean we simply teach algebra 1 curriculum over two years? We have small staff and do not have the extra time to train our Vocational teachers to teach a math class that might fulfill the requirement. I still wonder how "all" students will be able to perform at the levels desired. We will need help in these areas.
- More examples and professional development showing how to increase the academic rigor of Extended Applications.
- Standardized expectations for 'what counts' as extended application.
- Collaboration in creating project synergy and concrete examples to choose from.
- Professional development for administrators and teachers regarding expectations and possibilities for implementation.
- A clear description of what algebra I content is!!!! professional development to assure all use the state scoring guides in a consistent manner across all high schools
- Fund us better.
- More training.
- Continue to provide information regarding effective strategies to implement credit by proficiency. Provide cost-effective ways to provide initial as well as ongoing, refresher training on use of writing, speaking, and science inquiry scoring guides.
- Trainging and specific instructions / guidance.
- More funds to provide increased staff necessary to offer a comprehensive secondary education and meet the new requirements. Also, more pro dev opportunities that demonstrate what different models there could be for smaller districts such as ours.
- Funding and Teacher training for HQ.
- We need help developing HQ Science and Math teachers and also funding to pay for added staff positions.
- Clearly defined definition of capacity building and finds to support that issue.
- Professional Development, support from the state and funding for additional classrooms (space issues w/added coursework).
- Back off of other mandates and Money.
- Support and modelling for smaller districts to provide: 1) various math classes/sequences and potentially FTE to expand credits offered 2) remediation for students who need more time to achieve these standards requires additional resources - it's a cognitive development, readiness thing 3) difficult to build capacity for develop in-district alternatives (work samples, assessments, etc.) to meet diploma requirements
- This is a much larger question, and there is ample conversation around the issues. In relation to the Extended Application work, the new "essential skills" can integrate a

compliment the work nicely. Using technology, demonstrating global literacy, now largely undefined, could add a great deal of value to the Extended Application work while also providing a manageable mechanism for implementation and assessment of student proficiency in the remaining essential skills (i.e., the remaining five). As those skills become clarified, how these skills can enhance the Extended Application work is a valuable conversation to be having at the state and local levels.

- How to implement and still meet the needs of low-performing math students but still earn a high school diploma.

APPENDIX H

EXTENDED APPLICATION CAPACITY NEEDS GROUPED BY THEMES

Seventy respondents ($N = 70$) from the total number of survey respondents ($N = 88$) answered survey question 17. The following table groups the respondents' comments under common themes in the order of frequency of response. Comments that contain more than one theme are repeated under each corresponding category.

Theme	Code	Frequency	Percent
Time	1	$N = 23$	33%
<ol style="list-style-type: none"> 1. Time to implement. 2. Time for training in and application of the district senior project and additional staff. 3. Time, transportation, support from ODE and ESD, and integration of this requirement with other state and federal mandates - how do we prioritize and support all school improvement requirements and efforts? 4. Professional Development time to have teachers meet and collaborate to see how best they can serve their student's needs. 5. As always, time and money. The teachers are stretched and cuts have taken more time away from them as their classes grow. 6. Time to work together on work sample elements and elective courses that link content with essential skills. 7. Time to develop the program to fit the local needs and to educate the community about how the expectations have been increased. 8. Currently, training and professional plan time. 9. Time to implement building and district wide. 10. State paid time outside the school day/year for schools and community/business organizations to thoroughly discuss a partnership to deliver Extended Application and to develop the systems features and support mechanisms for this to be delivered successfully. 11. Time for staff to work together to plan consistent evaluation criteria along with other diploma goals. With only 151 student days and 178 staff days we are developing strategies to make the best use of our time. 12. Time. 13. Time and personnel. 14. It will be hard to get the commitment of teachers if time forces simple compliance and this will not lead to the high quality experience we want for all students. 15. Time & money. 16. Time and resources. 17. Professional Development, Fiscal Resources, Time. 18. Teacher and administrator time to make the experience valuable and aligned with academic goals. 19. Time in the week. We have a four day school week. Teachers are stretched to fit all 			

<p>the new requirements into the week as it is.</p> <p>20. Dollars and time.</p> <p>21. Time & money.</p> <p>22. Time, funding and training.</p> <p>23. Longer school year.</p>			
Theme	Code	Frequency	Percent
Financial Resources	2	N = 21	30%
<ol style="list-style-type: none"> 1. Money and staff development opportunities. 2. As always, time and money. The teachers are stretched and cuts have taken more time away from them as their classes grow. Extended application will become a check box over time if not funded properly. 3. The financial resources and FTE to make it happen. 4. State paid time outside the school day/year for schools and community/business organizations to thoroughly discuss a partnership to deliver Extended Application and to develop the systems features and support mechanisms for this to be delivered successfully. 5. Committed funding at the state level. 6. Financial resources. 7. Funding for staffing. 8. Money. 9. Having the resources to assist the teachers. Need money for more training at the state level. 10. More fiscal support to provide increased opportunities for application of learning. 11. Stable and adequate funding, along with the cessation and reversal of unfunded legislative and policy mandates that strain a small district's personnel and fiscal capacity with accountability and reporting requirements. 12. Time & money. 13. Time and resources. 14. Staffing and money. 15. Professional development, fiscal resources, time. 16. Funding. 17. More funds for a coordinator that could help to connect w/ the community. 18. Dollars and time. 19. Time & money. 20. Network with other districts, especially rural and small school districts with limited industry and financial resources to release teachers for this purpose. 21. Time, funding and training. 			

Theme	Code	Frequency	Percent
State-Level Guidance	3	N = 18	26%
<ol style="list-style-type: none"> 1. Adequate assessment and clear guidelines from ODE. 2. Time, transportation, support from ODE and ESD, and integration of this requirement with other state and federal mandates - how do we prioritize and support all school improvement requirements and efforts? 3. We need to know more about Extended Applications and how they can be integrated into our courses. 4. A much more clear understanding of the expectations-perhaps models upon which we can build. 5. Consistency from the state- level what we have alone so we can see the full benefit of an outstanding program that we are working on. 6. Somebody (ODE or ESD personnel) needs to go to the schools and prep people for this, suggest some methods and alternatives in meeting the requirements. When we survey staff for their in-service and training needs, this is not on their radar. 7. More information, professional development. 8. District level coaching of administrators. 9. Professional development, a model of implementation, and follow through from the state. 10. Stable and adequate funding, along with the cessation and reversal of unfunded legislative and policy mandates that strain a small district's personnel and fiscal capacity with accountability and reporting requirements. 11. flexibility in the staff and the creativity of projects by the students. 			
<p><i>Subtheme: Compliance vs. Commitment</i></p>			
<ol style="list-style-type: none"> 12. State paid time outside the school day/year for schools and community/business organizations to thoroughly discuss a partnership to deliver Extended Application and to develop the systems features and support mechanisms for this to be delivered successfully. It impacts course catalogs, student schedules, attendance programs, policies on being off campus, release time, mentorship's, record-keeping, parent and student buy-in and communication, capacity studies, etc. None of these things can be addressed while school is going on. No funds are available for successful and meaningful implementation. 13. The same issues that plagued small schools with CAM plague them today. 1. limited ability to partner with recourses outside the school. 2. The priority for professional development is placed on ELL, Reading and Math; there is not enough time to complete that. This passed summer, the district paid for almost 100% of the staff to attend a week long training session in ELD and SIOP. During the year there are 3 other in-service days; those will be spent discussing ELL, Reading, Writing, Math and Science data. 3. Several years ago, this district implemented a thorough Extended Application Program (then called CAM). It is currently monitored by a 1/2 time vice-principal that mentors the teachers on the go, class by class during advisory period. 			

The advisory teachers in turn monitor the students. It is an extremely difficult task. The board recently changed the name of the program from CAM to extended ended Application in our graduation requirements policy to comply with the new Oregon Diploma Requirements.

14. This gets lost in all the information about the Diploma changes because it is hard for the public to understand. Moving from an experience for some to a common experience for all is a huge step, which requires integrating it into all the other initiatives and yet retaining the critical criteria to make extended application effective. It will be hard to get the commitment of teachers if time forces simple compliance and this will not lead to the high quality experience we want for all students.
15. Another thing required.
16. I believe our high schools have the ability to support implementation and are doing many of the things required. But it has not been clearly communicated with staff or administrators, and it is viewed as one more thing asked of teachers but not clearly defined.
17. Must be relevant. Currently seen as an add-on, remake of the 1970's competencies-- been there, done that.
18. Extended Application will become a check box over time if not funded properly.

Theme	Code	Frequency	Percent
Professional Development	4	<i>N</i> = 13	19%
<ol style="list-style-type: none"> 1. Money and staff development opportunities. 2. Professional development for teachers so they can implement this across the curriculum. 3. Professional Development time to have teachers meet and collaborate to see how best they can serve their student's needs. 4. Currently, training and professional plan time. 5. Staff development and time to implement building and district wide. Currently only our senior seminar teachers are active in implementation and planning. 6. Rationale and staff development. 7. We have initiated district wide professional development once a quarter for all teachers to come together and work on all state and federal mandates. Professional development is specified as one of the district's top priorities. 8. More information, professional development. 9. Professional development, fiscal resources, time. 10. Professional development for administrators and teachers regarding expectations and possibilities for implementation. 11. Time and professional development. 12. More training. 13. Need money for more training at the state level. 			

Theme	Code	Frequency	Percent
Staff/FTE	5	<i>N</i> = 13	19%
<ol style="list-style-type: none"> 1. Time for training in and application of the district senior project and additional staff. 2. The financial resources and FTE to make it happen. 3. Funding for staffing. 4. Staffing. 5. Staffing. 6. Time and personnel. 7. CTE teachers and programs, senior seminar instructors, and guide at the side/sage on the stage for capstone products. 8. Stable and adequate funding, along with the cessation and reversal of unfunded legislative and policy mandates that strain a small district's personnel. 9. Staffing and money. 10. Additional staffing. 11. More funds for a coordinator that could help to connect w/ the community. 12. District level coaching of administrators. 13. Teacher/mentor who understands the “big picture” of what extended application is about and the relationship to Ed. Plan and Profile. Most of the direction comes from administration. 			

APPENDIX I

NEW GRADUATION REQUIREMENTS CAPACITY NEEDS
GROUPED BY THEMES

Seventy-two respondents ($N = 72$) from the total number of survey respondents ($N = 88$) answered survey question 18. The following table groups the respondents' comments under common themes in the order of frequency of response. Comments that contain more than one theme are repeated under each corresponding category.

Theme	Code	Frequency	Percent
State-Level Guidance	1	$N = 28$	39%
<i>Clear Expectations</i>			
<ol style="list-style-type: none"> 1. Specific instructions/guidance. 2. A clear description of what algebra I content is!!!! 3. Standardized expectations for 'what counts' as extended application. 4. We need direction in how to implement the math and science requirements. Especially math. Does this mean we simply teach algebra 1 curriculum over two years? We have small staff and do not have the extra time to train our Vocational teachers to teach a math class that might fulfill the requirement. I still wonder how "all" students will be able to perform at the levels desired. We will need help in these areas. 5. We need in-service time and someone who really understands all of the ramifications for t Clearer objectives. It seems like the old grad requirement with a new spin and lots of general wording left for districts to make decisions again. 6. Flexibility with title of math classes a template/guidance on how districts can meet the math goal. 7. We are taking care of requirements for math and science, but proficiency in essential skills is not clear as well as the rest of extended application...it seems to be somewhat we have had before with Career Related standards and CIM, but in a somewhat different format. I am hesitant to do too much with it until it becomes clearer what the expectations are. 8. Clear guidelines from ODE. 9. How to implement and still meet the needs of low-performing math students but still earn a high school diploma. 10. Financial resources in a declining economy and clearer objectives. It seems like the old grad requirement with a new spin and lots of general wording left for districts to make decisions again. 11. Communities and school cultures will comply, but will not shift core beliefs about what high school is for unless a much more grassroots change happens. That can only emerge from the teacher level up, and it may be too late to allow that to grow since the timelines are so tight. I guess I'm asking for the impossible: allow districts pursuing adaptive change to do that work. But there is little patience for that in the political system and the economy is conspiring to choke our resources right as this 			

- challenge is before us. Clearly I am not optimistic and have no answer to offer.
12. More thinking and answers from ODE regarding how we successfully raise standards for ALL students, with little or no additional resources. Resources meaning: curriculum, instruction, staff development, time, etc. How do small rural schools meet all new diploma requirements when content specialists are hard to come by and opportunities for extended application are limited? How on-line cyber schools/charter schools or colleges offering high school & adult high school diplomas meet these standards in the same manner regular public schools are required to meet? Where is the buy-in and planning from teacher education institutions and private business partners so K-12 initiatives are understood, supported, and integrated with post-secondary outcome partners? I would like to see community college and four-year colleges/universities staffs actively involved in an “on-site”, regular basis, helping K-12 teachers with development of curriculum/instruction strategies research-based practice implementation, assessment of learning success, and building connections with K-12 partners. I would like the state legislature, Board of Education, and ODE to think through and plan for the mandated requirements (e.g. do we have capacity to develop math/science curriculum and produce more math/science HQ teachers) before asking public schools to implement new requirements? I could go on...Thanks for asking?
 13. Increased support in work sample scoring. Increased support for technology.
 14. Television commercials communicating the new Oregon Diploma requirements – our folks don’t always read the paper or listen to the radio for news. Most of them rely on TV as their source of information.
 15. Improved certification flexibility that allows for CTE and HQ math/science combinations. Allowances for Algebra 1 math to be taught over two years instead of being restricted to one year for those students who would meet and exceed in all other areas but who struggle in higher level math.
 16. More help with mathematics. Getting them all through Algebra 2 will be nearly impossible.
 17. What is the alternative for special needs students other than having a modified diploma?

Examples/Models

18. Continue to provide information regarding effective strategies to implement credit by proficiency.
19. Collaboration in creating project synergy and concrete examples to choose from.
20. More examples and professional development showing how to increase the academic rigor of extended applications.
21. Some information on best practices to succeed at implementation, instead of strictly the requirements. In a small district many staff are stretched to capacity and now have one or more “issues to figure out.”
22. Model of implementation; standardize the requirements, process, and record keeping.
23. Sharing of successful models that are being developed.

24. Funding for teachers and collaboration between districts to see what is working and what is not.
25. Support and modeling for smaller districts to provide: 1) various math classes/sequences and potentially FTE to expand credits offered 2) remediation for students who need more time to achieve these standards requires additional resources - it's a cognitive development, readiness thing 3) difficult to build capacity for develop in-district alternatives (work samples, assessments, etc.) to meet diploma requirements.
26. This is a much larger question, and there is ample conversation around the issues. In relation to the extended application work, the new "essential skills" can integrate and compliment the work nicely. Using technology, demonstrating global literacy, now largely undefined, could add a great deal of value to the extended application work while also providing manageable mechanism for implementation and assessment of student proficiency in the remaining essential skills (the remaining five). As those skills become clarified, how these skills enhance the extended application work is a valuable conversation to be having at the state and local levels.
27. The state should partner with districts and non-profit organizations that are addressing some of these areas to release teachers to share their expertise and delivery models with the state. These can be video taped and posted on an ODE implementation website. Also, schedule webinars several times a week on each of these elements of the diploma and allow teachers to log in and "self train" on their own. Then, at least with the stage set through the video, districts can provide time to get teachers together to talk about this...without additional funding for staff development. Our staff development funds (Title IIA) were frozen as a result of not making AYP. We are now not able to support implementation conversations out of our general funds or OR Title funds.
28. From our School Board to our students, there is support and a vested interest in the increased subject-area diploma requirements and demonstrated proficiencies in essential skills. These are accepted as critical indicators of increased rigor in a high school diploma. All accept the critical need of an education plan and planning for all students. However, very, very, few support the CRLS, CLREs, and EA as critical indicators of a more rigorous diploma. Cited continually in conversations about Oregon diploma requirements is that few, if any, states have career-related diploma requirements while all have focused on "raising the bar" through increased subject-area requirement, specific core course requirements, and demonstration of proficiencies through some type of assessment. Why are we so married to the CRLS, CLREs and EA in Oregon?

Theme	Code	Frequency	Percent
Professional Development	2	<i>N</i> = 25	35%
1. Professional development.			
2. Teacher training for HQ.			
3. More professional development opportunities that demonstrate what different models			

there could be for smaller districts such as ours.				
4. Training and specific instructions/guidance.				
5. Provide cost-effective ways to provide initial as well as ongoing, refresher training on use of writing, speaking, and science inquiry scoring guides.				
6. Professional development to assure all use the state scoring guides in a consistent manner across all high schools.				
7. Increased support in work sample scoring.				
8. Professional development for administrators and teachers regarding expectations and possibilities for implementation.				
9. Professional development.				
10. More training.				
11. Professional development at zero cost to district.				
12. Professional development opportunities.				
13. We need in-service time and someone who really understands all of the ramifications for the new diploma to give us an understandable explanation.				
14. Funding for teachers and collaboration between districts to see what is working and what is not.				
15. Staff development.				
16. Professional development.				
17. Provide training to teachers on instructional practices that will ensure that students are successful. Use of best practices by other districts as a resource for staff members who are struggling with change.				
18. Professional development that is local – we are 3-5 hours from most of the sites where training is offered. We only have four 7-12 th grade teachers and having them all gone at the same time is usually impossible.				
19. Local staff development – if the staff development is in Salem we have to pay for subs, travel food, lodging, etc....we need the ESDs to help pick up this piece.				
20. We need in-service time.				
21. Funding and Teacher training for HQ.				
22. Professional Development, Time, Resources.				
23. Increased funding for professional development. We are currently using all of our Title 11A funds in this area. Maybe we can stop testing all 10th grade students on the PSAT and funnel that money back to the LEA's from the ESD?				
24. Funding to allow districts to offer staff development days outside of the required instructional time.				
25. Our staff development funds (Title IIA) were frozen as a result of not making AYP. We are now not able to support implementation conversations out of our general funds or OR Title funds.				
	Theme	Code	Frequency	Percent
	Staffing	3	N=18	25%
1. We need help developing HQ Science and Math teachers and also funding to pay for added staff positions.				

2. More funds to provide increased staff necessary to offer a comprehensive secondary education and meet the new requirements.
3. Additional resources for staffing, potential space needs.
4. We are sweating bullets trying to figure out how to add teachers to cover the math and science requirements. Implementation hasn't even been discussed.
5. Funding. The increased requirements increases need for staffing; in a small district/school, highly qualified / licensure issues become formidable.
6. HQ personnel to work in ... and to begin to fund k-12 small schools on a flat or sliding scale with a floor instead of using child count statistics.
7. We will need an additional math teacher beginning 2009-2010 the state has not provided additional funding for staff.
8. Staffing.
9. Money for math specialists.
10. Math & science teachers and support for small charter, rural schools to hire additional staff to make this a reality.
11. This requirement may be more about adding fte in order to provide more course offerings.
12. Professional development and funding for additional FTE to support the new requirements.
13. Additional dollars to hire staff for mathematics and science courses.
14. They (state) needs to fund the extra teachers we need to complete the new standards, as well as all the other unfunded mandates.
15. More money for space and staff.
16. Money, more math teachers, technology enhancements, lab remodel.
17. Funding to hire HQ staff.
18. Will this be another unfunded mandate meaning will I have to cut elective programs to meet this requirement? How will a small school compete for advanced math teachers with urban area schools who can pay higher?

Theme	Code	Frequency	Percent
Financial Resources	4	<i>N</i> = 15	21%
<ol style="list-style-type: none"> 1. Money. 2. Fund us better. 3. Money. 4. Funding, funding, funding. 5. Continued SIF money. 6. Financial resources in a declining economy and clearer objectives. It seems like the old grad requirement with a new spin and lots of general wording left for districts to make decisions again. 7. Clearly defined definition of capacity building and funds to support that issue. 8. Resources. We are in a conundrum. In order to provide properly for the students, electives are cut to provide academics and kids need electives to keep them in school. Continued training in how to build the graduation requirements into the electives is crucial as the need to allow teachers not highly qualified in the academic area to grant 			

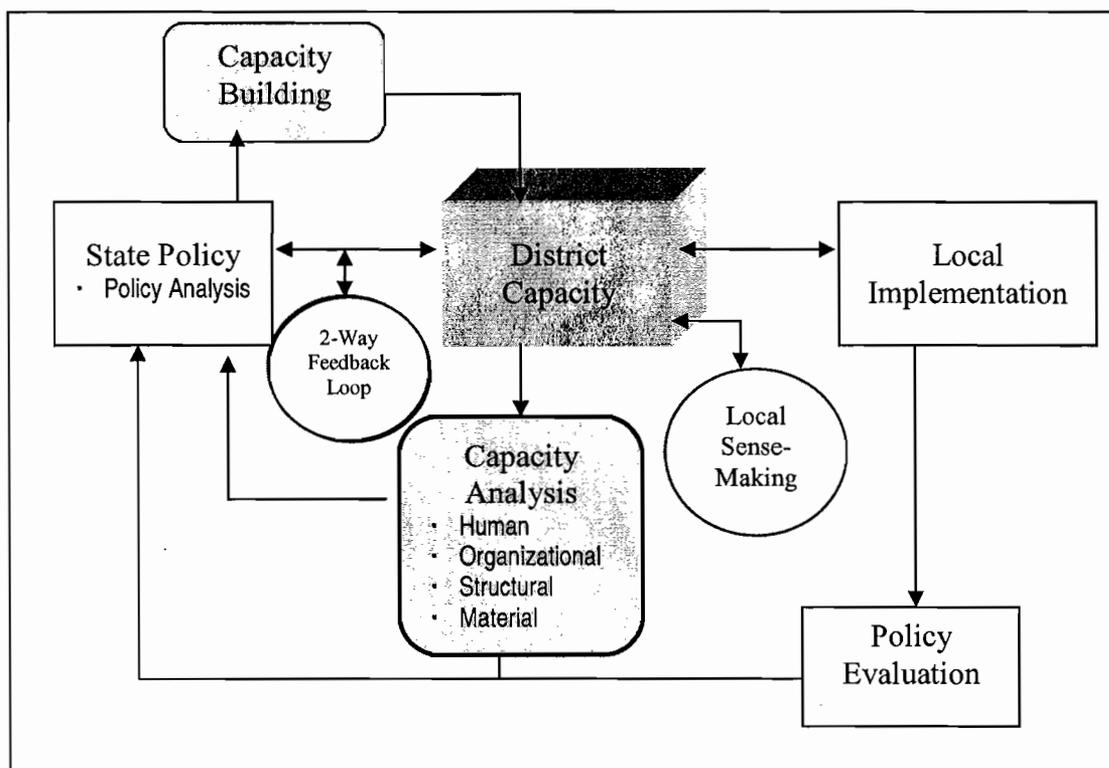
- credit. Credit for proficiency is a help, but a slow way to go when trying to convince academic teachers and administrators that the credit is as valuable as in the academic classroom.
9. School Improvement money that goes DIRECTLY to the high school and not controlled at the District level specific to implementation and continuation of the Extended Application
 10. Support from the state and funding for additional classrooms (space issues w/added coursework).
 11. We lack sufficient lab space to offer 3 full years of lab science. Our only choice will be to offer some coursework that has extensive outside lab work...which costs money and resources that we don't have.
 12. Funding for additional learning time and resources needed for all students to complete required coursework and tests.
 13. Funding to support the additional systems that will need to be in place for those student who don't pass their OAKS testing.
 14. Funding. The increased requirements increases need for staffing; in a small district/school, highly qualified / licensure issues become formidable.
 15. There needs to be a more fair method to figure small (high) school adjustment...as a district that is declining in enrollment and is now under 350 students, it is increasingly more difficult to add new requirements. This is especially true in light of HQT. What would help is to have a small school adjustment for all high schools under 350 students; not just for schools who have always been under 350 students.

APPENDIX J

CONCEPTUAL FRAMEWORK FOR A STATE POLICY-LOCAL
IMPLEMENTATION PROCESS

Based on a review of the literature on policy implementation (Barber, 2008; Conley, 2003; Fowler, 2004; Fullan 2001; Levine, 2008; Massell, 1998; Sjogren, 1978; Spillane, Reiser, & Reimer, 2002), I developed a conceptual framework for capacity analysis that involves state-local partnerships and a two-way feedback loop to inform policy formulation and implementation illustrated in Figure 6.

FIGURE 6. A Conceptual Framework for a Policy-Implementation Process



Components of the policy-implementation process include:

- State Policy: Policy analysis and communication of policy intent to districts (see Table 13).
- Two-way Feedback Loop: Direct on-line communication from the state to districts and feedback to the state from the districts.
- District Capacity: District response to state policy is mediated by its capacity (See Table 13).
- Capacity Analysis: Analysis of district capacity (human, organizational, structural, and material capacity) to inform policy formulation.
- Local Sense-Making: District-level social interactions, e.g. collaborative networks and communities of practice, to make meaning of state policy.
- Local Implementation: Putting policy into practice.
- Policy Evaluation: Determine the policy effectiveness and revise or redefine policy.
- Capacity Building: Strategic capacity building strategy based on capacity analysis.

TABLE 13. Policy and Capacity Analysis Questions in a Policy-Implementation Process

State Policy Analysis Questions

The following questions may be addressed regarding the proposed policy during the policy formulation stage (adapted from Sjogren, 1978).

- What is the purpose of the policy?
- At whom is the policy targeted?
- What is the scope of the policy?
- How does this policy align or conflict with existing state or federal policies?
- By what means or techniques will policy goals be effected?
- What is the state's capacity to support implementation of this policy (time, money, key people)?
- By what criteria will the success of the policy be determined?
- What types of resources will be necessary to effect policy goals?
- Who will provide these resources and who should bear their costs?
- What types of costs will the policy incur?
- Who specifically needs to be involved to achieve the policy goals?
- What forums will be used to engage stakeholders?

District Capacity Analysis Questions

The following questions may be addressed to determine districts' capacity to support the proposed state policy.

Human Capacity

- What is the current level of knowledge and understanding of the policy in the district? (i.e. administrators, teachers, counselors, board members, parents, etc.)
- What is the current skill level of staff who will be implementing the policy?
- Is the policy consistent with the district's vision and goals for student achievement?
- Is the policy consistent with the district's priorities?
- Is the policy consistent with the values of the community?
- What is the district's commitment to support implementation of the policy?

Organizational Capacity

- Who will need professional development to implement this policy?
- What kind of professional development is needed and who will provide it?
- What are the opportunities for teachers to networking with colleagues with in and out of the district?
- What are the opportunities for partnerships with external organizations to support implementation?
- Is there a shared understanding of this policy across the district?

Structural Capacity

- What local policy and procedures need to be developed and adopted by the school board?
- How will the policy be coordinated with district and school improvement efforts?
- How will implementation of the policy be monitored?
- What additional programs or interventions for students are needed to support this policy?

Material Capacity

- What demand on time does this policy create? (i.e. how much time, how will time be used, what will it cost?)
- Is current district staffing sufficient to support implementation of this policy? If not, what kind of staff is needed?
- What curriculum, instructional, and assessment resources are needed for implementation?
- Will this policy require additional facility space?
- Are all costs associated with implementation included in the district's operating budget?
- Can funds be leveraged to support implementation of this policy?

REFERENCES

- Aschbacher, P.R. (1991). Performance assessment: State activity, interest, and concerns. *Applied Measurement in Education*, 4(4), 275-288.
- Avery, P.G., Beach, R., & Coler, J. (2003). The impact of Minnesota's "Profile of Learning" on teaching and learning in English and social studies classrooms. *Education Policy Analysis Archives*, 11(7). Retrieved April 3, 2005 from <http://epass.asu.edu/epaa/v11n7/>.
- Barber, M. (2009). From system effectiveness to system improvement: Reform paradigms and relationships. In A. Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 71-94). Bloomington, IN: Solution Tree.
- Baron, J. B. (1998). Using learner-centered assessment on a large scale. In N. Lambert & B. McComb, (Eds.), *How students learn: reforming schools through learner-centered education* (pp.211-240). Washington, DC: American Psychological Association.
- Berman, P. (1978). The study of macro and micro implementation. *Public Policy*, 26(2), 167-184.
- Berman P. & McLaughlin, M.W. (1976). Implementation of educational innovation. *Educational Forum*, 40(3), 344-370.
- Black, P. & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principals, Policy & Practice*, 5(1), 1-68.
- Boston, C. (2002). The concept of formative assessment. *Practical Assessment, Research & Evaluation*, 8(9). Retrieved December 2, 2007, from <http://PAREonline.net/getvn.asp?v=8&n=9>.
- Bulkley, K., Fairman, J., & Martinez, M.C. (2002). *Teaching the test to teachers: District capacity and policy pedagogy*. Arlington, VA: National Science Foundation. (ERIC Document Reproduction Service No. ED469722)
- Century, J.R. (1999). *Determining capacity within systemic educational reform*. Paper presented at the annual meeting of the American Educational Research Association, Montréal.
- Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Educational Policy*, 19(3), 476-509.

- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Conley, D.T. (2003). *Who governs our schools? Changing roles and responsibilities*. New York: Teachers College Press.
- Council of Chief State School Officers. (2001). *Annual survey state student assessment program: A summary report fall 2001*. Washington, DC: Author.
- Cromey, A. & Hanson, M. (2000). An exploratory analysis of school-based student assessment systems. *Educational Policy*. North Central Regional Education Laboratory, 1-23. Retrieved December, 29, 2007, from <http://ncrel.org/policy/pubs/html/data/index.html>
- Darling-Hammond, L., Rustique-Forrester, E., Pecheone, R.L. (2005). *Multiple measures approach to high school graduation*. Stanford, CA: The School Redesign Network.
- Darling-Hammond, L. (1994). Setting standards for students: The case for authentic assessment. *Educational Forum*, 59(1), 14-21.
- Datnow, A. (2005). The sustainability of comprehensive school reform models in changing district and state contexts. *Educational Administration Quarterly*, 41(1), 121-153.
- David, J. (1990). Restructuring in progress: Lessons from pioneering districts. In R.F. Elmore (Ed.), *Restructuring schools: The next generation of education reform* (pp. 209-250). San Francisco: Jossey-Bass.
- Dorr-Bremme, D.W. & Herman, J.L. (1986). *Assessing student achievement: A profile of classroom practices* (CSE Monograph Series in Evaluation No. 11). Los Angeles, CA: University of California, Center for the Study of Evaluation.
- Dufour, R., Dufour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.
- Dunbar, S.B., Koretz, D.M., & Hoover, H.D. (1991). Quality control in the development and use of performance assessments. *Applied Measurement in Education*, 4(4), 289-303.

- Dutro, E., Fisk, M.C., Koch, R., Roop, L.J., & Wixson, K. (2002). When state policies meet local contexts: Standards-based professional development as a means to individual agency and collective ownership. *Teachers College Record, 104*(4), 787-811.
- Elmore, R. (1990). On changing the structure of public schools. In R. Elmore & Associates (Eds.), *Restructuring schools: The next generation of educational reform* (pp. 1-29). San Francisco: Jossey-Bass.
- Elmore, R.F. (1983). Complexity and control: What legislators and administrators can do about implementing public policy. Shulman, L.S. & Sykes, G. (Eds.), *In Handbook of teaching and policy* (pp. 342-369). New York: Longman.
- Fairman, J.C. & Firestone, W.A. (2001). The district role in state assessment policy: An exploratory study. In S.H. Fuhman (Eds.), *From the capitol to the classroom: Standards-based reform in the states* (pp. 124-147). Chicago: University of Chicago Press.
- Falk, B., Ort, S.W., & Moirs, K. (2007). Keeping the focus on the child: Supporting and reporting on teaching and learning with a classroom-based performance assessment system. *Educational Assessment, 12*(1), 47-75.
- Fink, A. (2003). *How to manage, analyze, and interpret survey data*. Thousand Oaks, CA: Sage.
- Firestone, W. (1989). Using reform: Conceptualizing district initiative. *Education and Policy Analysis, 11*(2), 151-164.
- Florian, J., Hange, J., & Copeland, G. (2000, April). *The phantom mandate: District capacity for reform*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Fowler, F.C. (2004). *Policy studies for educational leaders: An introduction*. Upper Saddle River, NJ: Prentice Hall.
- Fullan, M. (2008). *Have theory, will travel: A theory of action for system change*. In A. Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 275-293). Bloomington, IN: Solution Tree.
- Fullan, M. (2004). *Systems thinkers in action: Moving beyond the standards plateau* (DfES Publication No. 1060/2004). Nottingham, England: Department for Education and Skills.

- Fullan, M. (2001). *The new meaning of educational change* (3rd ed.). New York: Teachers College Press.
- Furman, S., Clune, W., & Elmore, R. (1991). Research on education reform: Lessons on the implementation of policy. In A. Odden (Ed.), *Education policy implementation* (pp. 197-218). Albany, NY: State University of New York Press.
- Goertz, M.E., Floden, R.E., & O'Day, J. (1995). *Studies of education reform: Systemic reform*. New Brunswick, NJ: Rutgers University, Center for Policy Research in Education.
- Hargett, G. & Fielding, G. (2007). *Implementation patterns in Marion, Polk, and Yamhill Counties*. Unpublished report, Mid-Willamette Education Consortium, Salem, OR.
- Hargreaves, A., Earl, L., & Schmidt, M. (2002). Perspectives on alternative assessment reform. *American Educational Research Journal*, 39(1), 69-95.
- Hargreaves, A. & Fullan, M. (1998). *What's worth fighting for out there?* New York, NY: Teachers College Press.
- Hargrove, E. (1975). *The missing link: The study of implementation of social policy*. Washington, DC: Urban Institute.
- Hoyle, T.B., Samek, B.B., & Valois, R.F. (2008). Building capacity for the continuous improvement of health-promoting schools. *Journal of School Health*, 18, 1-8.
- Huck, S.W. (2004). *Reading statistics and research*. Boston, MA: Pearson.
- Khatti, K., Reeves, A.L., & Adamson, R.J. (1997). *Assessment of student performance: Studies of education reform*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Laboratory Network Program's CLI Project. (2000). *District Approaches to Education Reform*. Aurora, CO: Mid-Continent Research for Education and Learning.
- Lane, S., Parke, C.S., & Stone, C.A. (2002). The impact of a state performance-based assessment and accountability program on mathematics instruction and student learning: Evidence from survey data and school performance. *Educational Assessment*, 8(4), 279-315.

- LaRocque, L. (1986). Policy implementation in a school district: A multiperspective approach. *Canadian Journal of Education*, 11(4), 486-508.
- Levin, B. (2008). Reform without (much) rancor. In A. Hargreaves & M. Fullan (Eds.), *Change wars* (pp. 259-272). Bloomington, IN: Solution Tree.
- Linn, R.L., Baker, E.L., & Dunbar, S.B. (1991). Complex, performance-based assessment: Expectations and validation criteria. *Educational Researcher*, 20(8), 1-14.
- MacIver, M.A. & Farley, E. (2003). Bringing the district back in: The role of the central office in improving instruction and student achievement (Report 65). Baltimore, MD: Center for Research on the Education of Students Place At Risk.
- Madaus, G. F. & O'Dwyer, G.F. (1999). A short history of performance assessment. *Phi Delta Kappan*, 80(9), 1-12.
- Marsh, J.A. (2000, September). *Connecting districts to the policy dialogue: A review of literature on the relationship of districts with states, schools, and communities*. A CTP working paper. Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.
- Massell, D. (1998). *State strategies for building capacity in education: Progress and continuing challenges*. (CPRE Research Report Series RR-41). Philadelphia, PA: Consortium for Policy Research in Education.
- McLaughlin, M.W. (1989, September). *The Rand change agent study ten years later: Macro perspectives and micro realities*. Paper presented at a meeting of the American Educational Research Association, San Francisco, CA.
- McLaughlin, M.W. (1987). Learning from experience: Lessons from policy implementation. In A. Odden (Ed.), *Education policy implementation* (pp. 185-195). Albany, NY: State University of New York Press.
- McLaughlin, M.W. (1976). Implementation as mutual adaptation: Change in classroom organization. *Teachers College Record*, 77(3), 339-351.
- Meltzoff, J. (1998). *Critical thinking about research. Psychology and related fields*. Washington, DC: American Psychological Association.
- Messick, S. J. (1998). Alternative modes of assessment, uniform standards of validity. In M.H. Hackett (Ed.), *Beyond multiple choice: Evaluating alternatives to traditional testing for selection* (pp. 59-74). Mahwah, NJ: Lawrence Erlbaum Associates.

- Meyer, C. (1992). What's the difference between authentic and performance assessments? *Educational Leadership*, 39-42.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform. A report to the nation and the Secretary of Education*. Washington, DC: U.S. Government Printing Office.
- National Research Council (2001). *Knowing what students know: The science and design of educational assessment*. J. Pelligrino, N. Chudowsky, & R. Glaswer (Eds.), Committee on the Foundations of Assessment. Washington, DC: National Academy Press.
- Niemi, D., Baker, E.L., & Sylvester, R.M. (2007). Scaling up, scaling down: Seven years of performance assessment development in the nation's second largest school district. *Educational Assessment*, 12 (3&4), 195-214.
- Odden, A. (1991). *The evolution of educational policy implementation*. In A. Odden (Ed.), *Educational policy implementation* (pp. 1-12). Albany, NY: State University of New York Press.
- Oregon Department of Education. (2007). *Oregon's new diploma*. Salem, OR: Author.
- Oregon Department of Education. (January 2005). *Career-Related Learning Standards and Extended Application Standard: Guide for Schools to Build Relevant and Rigorous Collections of Evidence*. Salem, OR: Author.
- Oregon Department of Education. (2005). *Certificate of Advanced Mastery and Diploma Guide for Schools*. Salem, OR: Author.
- Oregon Secretary of State. (2009). *Oregon Administrative Rules, Division 22*. Salem, OR: Oregon State Archives.
- Oregon State Board of Education. (2008). *National Professional Standards for Teachers*. State Board of Education Topic Summary. Salem, OR
- O'Toole Jr., L. (1986). Policy recommendations for multi-actor implementation: An assessment of the field. *Journal of Public Policy*, 6(2), 181-210.
- Paris, S.G. (1998). Why learner-centered assessment is better than high-stakes testing. In N. Lambert & B. McComb, (Eds.), *How students learn: Reforming schools through learner-centered education*. Washington, DC: American Psychological Association.

- Pedhazur, E.J. (1997). *Multiple regression in behavioral research: Explanation and prediction*. Fort Worth, TX: Harcourt Brace College
- Pellegrino, J.W. (2004). *The evolution of educational assessment: Considering the past and imagining the future*. Princeton, NJ: Educational Testing Service.
- Quality Education Commission. (2008). *Quality education model final report*. Salem, OR: Author.
- Rea L.M. & Parker, R.A. (2005). *Designing and conducting survey research: A comprehensive guide*. San Francisco, CA: Jossey-Bass.
- Resnick, D.P. & Resnick, L.B. (1996). Performance assessment and the multiple functions of educational measurement. In M. Kane & R. Mitchell (Eds.), *Implementing performance assessments: Promises, problems and challenges*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Rossman, G.B. & Wilson, B. L. (1996). Context, courses, and the curriculum: Local responses to state policy reform. *Educational Policy*, 10(3), 99-421.
- Shannon, G.S. & Bylsma, P. (2004). *Characteristics of improved school districts: Themes from research*. Olympia, WA: Washington Department of Education.
- Shapely, K.S. & Bush, M.J. (1999). Developing a valid and reliable portfolio assessment in the primary grades: Building on practical experience. *Applied Measurement in Education*, 12(2), 111-132.
- Schmidt, M. & Datnow, A. (2005). Teachers' sense-making about comprehensive school reform: The influence of emotions. *Teaching and Teacher Education*, 21, 949-965.
- Sipple, J.W., & Killeen, K. (2004). Context, capacity and concern: A district-level analysis of the implementation of standards-based reform. *Education Policy*, 18(3), 456-490.
- Sipple, J.W., Killeen, K., & Monk, D.H. (2004). Adoption and adaptation: School district response to state imposed learning and graduation requirements. *Educational Evaluation and Policy Analysis*, 26(2), 143-168.
- Sjogren, J. (1978). Program costs: Their role in policy formulation, implementation and evaluation. *Planning and Changing*, 9(4), 210-217.

- Slater, T.F., Ryan, J.M., & Samson, S.L. (1997). Impact and dynamics of portfolio assessment and traditional assessment in a college physics course. *Journal of Research in Science Teaching*, 34, 244-271.
- Spillane, J.P. (1996). School districts matter: Local educational authorities and state instructional policy. *Educational Policy*, 10(1), 63-87.
- Spillane, J.P. (2000). Cognition and policy implementation: District policymakers and the reform of mathematics education. *Cognition and Instruction*, 18(2), 141-179.
- Spillane, J.P. (2002). Local theories of teacher change: The pedagogy of district policies and programs. *Teachers College Record*, 104(3), 377-420.
- Spillane, J. (2005, June). *Standards deviation: How schools misunderstand education policy*. (Policy Brief RB-43). Philadelphia, PA: University of Pennsylvania, Consortium for Policy Research in Education.
- Spillane, J.P, Reiser, B.J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387-431.
- Spillane, J.P. & Thompson, C. (1997). Reconstructing conceptions of local capacity: The local education agency's capacity for ambitious instructional reform. *Educational Evaluation and Policy Analysis*, 19(2), 185-203.
- SPSS Inc. (2007). SPSS Graduate Pack 16.0 for Windows. Chicago, IL.
- Stiggins, R. (2007). Five assessment myths and their consequences. *Education Week*. Retrieved October 18, 2007, from http://www.edweek.org/ew/articles/2007/10/17/08_stiggins.h27.html?print=1
- Stiggins, R.J. (1991). Facing the challenges of a new era of educational assessment. *Applied Measurement in Education*, 4(4), 263-273.
- Stiggins R.J. & Bridgeford, N.J. (1985). The ecology of classroom assessment. *Journal of Educational Measurement*, 22(4), 271-286.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Survey Monkey. (2009) Survey Monkey software. Retrieved May 18, 2008, from <https://www.surveymonkey.com/Default.aspx>

- Tisani, N. (2008). Challenges in producing a portfolio for assessment: In search of underpinning educational theories. *Teaching in Higher Education, 13*(5), 549-557.
- U. S. Department of Education. (2002). *No child left behind*. Washington, DC: Author.
- Walker, E.M. (2004). The impact of state policies and actions on local implementation efforts: A study of whole school reform in New Jersey. *Educational Policy, 18*(2), 338-363.
- Waters, T. & Marzano, R. (2006). *School district leadership that works: The effect of superintendent leadership on student achievement*. Denver, CO: Mid-Continent Research for Education Learning.
- Wiggins, G. (1990). The case for authentic assessment. *Practical Assessment, Research & Evaluation, 2*(2). Retrieved March 25, 2008, from <http://PAREonline.net/getvn.asp?v=2&n=2>
- Wolfe, S.A., Borko, H., Elliott, R.L., & McIver, M.C. (2000). That dog won't hunt!: Exemplary school change efforts within the Kentucky reform. *American Educational Research Journal, 37*, 349-393.
- Wolfe, E.W. & Miller, T.R. (1997). Barriers to the implementation of portfolio assessment in secondary education. *Applied Measurement in Education, 10*(3), 235-251.