The Impact of Implementing the Statewide Alternate Assessment Portfolio on Student Access to the General Curriculum

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Abstract

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With the passage of No Child Left behind Act and accountability provisions for all students, it is important that teachers and educational leaders are able to implement assessments appropriately, including alternate assessments for students with significant disabilities. Through secondary survey analysis and case studies of three middle school students who participated in the Washington portfolio assessment, this inquiry investigated the process of and possible effects of implementing the alternate assessment on teachers' actions in providing access to the academic curriculum for students with significant disabilities in Washington State. The results from this research suggest findings in six areas: teachers with more portfolio experience appear to more fully integrate portfolio elements into classroom routines; regardless of experience with portfolio assessment, teachers may not understand how to provide instruction in academic content for students with significant disabilities; teachers' views of the connections between portfolio evidence and the teaching and learning going on in the classroom may influence whether the teacher will make any changes in providing greater access to the general curriculum; student achievement toward meeting state standards in academic content may depend on having viable communication systems and effective data collection methods of student learning; teacher use of alternate assessment and WAAS performance data may determine, in part, the level of instructional and programmatic changes focused on increasing student academic learning; and fulfilling reform

expectations is dependent, in part, on school district commitment to implementing alternate assessment as part of an overall program design for students with significant disabilities.

In addition, the study findings suggest areas for further research and potential actions for state and school district leadership in order to support the appropriate implementation and use of alternate assessment in Washington in the following aspects: exploring full inclusion in state assessments; using the implementation of alternate assessments as a way to raise teacher expectations and promoting greater access to the general curriculum for students with significant disabilities; aligning curriculum, instruction, and alternate assessment to academic content; and taking steps to ensure appropriate communication, understanding and *use* of assessment results.

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PREFACE

The thrust of federal and state education reform legislation in the last decade has focused on the goal of improved student learning for *all* children. In that spirit, the legislation seeks to include students with disabilities in school reform efforts, by increasing their access to the general curriculum standards, access to assessment programs, and inclusion in accountability systems. The Individuals with Disabilities Act amendments (IDEA, 2004; IDEA, 1997) charged states to determine academic content standards for all students and to find ways to assess student progress toward these academic goals (Kampfer, Horvath, Kleinert, & Kearns, 2001).

A small number of students with disabilities, however, who had not been included in school reform activities due to the severity of their disabilities, were generally taught a separate life-skills curriculum and were unable to participate in paper and pencil assessments. For them, the IDEA required states to develop and implement alternate assessments linked to state academic content standards. Therein lies the challenge for states, school districts, and teachers: to design and implement an alternate assessment targeting reading, writing, and mathematics content for students with the most significant cognitive disabilities who may not be expected to read or write at all or ever be able to perform numerical operations.

This document presents the results of a study that investigated the implementation of alternate assessments and the effects of that implementation on teachers and students in Washington State. This investigation endeavored to better understand how teachers were carrying out the federal requirements for assessing students with significant

disabilities in academic content areas. The research inquiry also focused on studying the effects of implementing the alternate assessment on teachers' actions, in providing access to the academic curriculum for students with significant disabilities, and on the students themselves.

Overview of Problem of Practice and Focus for Inquiry

The problem of practice on which this inquiry concentrates is driven by converging federal policies. As part of its mandate that states develop learning standards in academic content areas, the Elementary and Secondary Education Act reauthorization of 1994 (ESEA) set up accountability requirements for alternate assessment (U. S. Department of Education, 2004). Specifically, ESEA required that alternate assessments for the group of students with significant disabilities be clearly linked to state standards, promote access to the general curriculum, and expect teachers to exercise professional judgment of the highest learning standards possible. IDEA (1997) followed suit, requiring that states assess the performance of all students toward meeting state standards in the general curriculum and reinforced the notion that alternate assessments be aligned to the state's challenging academic content standards and yield results in the same academic content areas that were tested on the general assessments.

These new rules challenged states, including Washington, to reexamine assessment participation guidelines for state testing as well as the content of alternate assessments that had been developed. Washington State leaders have attempted to address these federal requirements by developing and revising assessment policies and practices during the school reform movement—specifically, by assessing students with

significant disabilities using the portfolio method, with entries in reading, writing, and mathematics, through the Washington Alternate Assessment System (WAAS).

Questions and concerns expressed to state officials in the early years of the WAAS alternate assessment generated a set of concerns for policy and practice in Washington and provided the catalyst for this study. Specific challenges included developing and implementing alternate assessments, determining appropriate instructional programs for students with significant disabilities that linked Individualized Education Programs (IEPs) with academic content, and helping educators learn how to use alternate assessment data to document student learning and provide feedback for instruction.

The purpose of this inquiry was to explore what transpired as teachers and local school systems responded to the state's alternate assessment design. The focus on local implementation and effects led to several research questions and the two-phase approach to this research. First, the study analyzed existing data from state-wide surveys of teachers' perceptions about implementing the WAAS portfolio conducted in the fall of 2003. Unlike previous surveys, which focused more on the logistical implications of alternate assessments, the 2003 surveys addressed for the first time the major challenges of teaching and assessing students with significant disabilities in academic content areas. The first two research questions focused on teachers' perceptions of changes in student participation in standards-based activities in reading, writing, and mathematics after implementing the portfolio assessment, and on changes in teaching academic content to students with significant disabilities.

1) Based on teacher perceptions, were there any changes in the access to the general curriculum for students with significant disabilities following the implementation of the WAAS portfolio alternate assessment? This question was prompted by the apparent disconnect between what was taught (functional skills) and what was tested on WAAS (academic skills) as seen in earlier survey work.

2) Were there any changes in student programs or achievement in the general curriculum? This research question targeted survey responses about instructional changes and success of students meeting IEP goals linked to state standards as well as reasons for any changes.

The second phase of the research included an in-depth case study examination of three middle school students who participated in the alternate assessment in 2004. The cases were selected to represent differing levels of teachers' experience in implementing the portfolio and differing types of students with significant disabilities, as well as providing a look at the school district conditions and contexts under which each teacher was operating in Washington State. These case studies included interviews with parents and teachers, student observations, and a review of the students' previous and current IEPs and WAAS portfolios in order to understand any impacts or changes that may have occurred and the reasons for those changes. These case studies permitted four more questions to be investigated regarding the three students and their teachers:

3) What were the specific steps taken by teachers to implement the alternate assessment portfolio for the target students?

4) In what ways, if at all, did these students experience a programmatic change in access to state academic content standards following implementation of this alternate assessment?

5) What changes, if any, did these students experience in the achievement of IEP skills that are linked to state standards?

6) What factors, including the implementation of alternate assessments, may account for any program or performance changes?

The results of this study offer specific images of the alternate assessment in action in differing local contexts. Patterns of implementation and the differences among the local responses to this state policy can inform state and school district leadership actions to support the appropriate implementation and use of the WAAS portfolio assessment in Washington. The results can also give state and school district administrators ideas about how they might use alternate assessment to support learning improvement goals in the classroom.

Critical Challenges in Implementing Alternate Assessment for Students with Significant Disabilities

Several challenges in testing students with significant disabilities have arisen during the implementation of state alternate assessments, which may present barriers to learning for these students. More important to leaders, these issues may present challenges in achieving larger education reform goals for all students. Five challenges for assessing students with significant disabilities are summarized below.

First, the first challenge for leaders is to confront and overcome a natural tendency to exempt or exclude students with significant disabilities who are often exempted or excluded from testing. Thompson, Quenemoen, Thurlow and Ysseldyke (2001) note that low expectations are the most frequent reason for not including students with most significant disabilities in assessment systems. Additionally, students with significant disabilities generally exhibit difficulty in expressing or demonstrating what they have learned (Browder, 2001).

The second challenge for alternate assessments is to overcome the generally low

expectations for students with disabilities (Browder, Spooner, Algozzine, Ahlgrem-Delzell, Flowers, & Karvonen, 2003; Thompson, Quenemoen, Thurlow & Ysseldyke, 2001). Also, states need to be more consistent in designing alternate assessments with academic content in mind (Quenemoen, Massanari, Thompson, & Thurlow, 2000), which also may have promoted the impression that students with significant disabilities are not expected to demonstrate reading or mathematics skills.

The third challenge for alternate assessments is to provide meaningful access for students with significant disabilities to the same standards-based curriculum and to find meaningful ways to assess their performance against the same state content standards (Browder et al., 2003). Browder (2001) cautions that ". . . in the absence of an established curriculum for students with severe disabilities, assessment has often been a futile process, producing little of value for developing the IEP" (p.9).

The fourth challenge of alternate assessment, according to Browder and colleagues (2003), is to improve the quality of academic instructional programs in the classrooms serving students with significant disabilities. Teachers often teach skills-based on functional outcomes, such as community access or meaningful employment (Browder, Karvonen, Davis, Fallin & Courtade-Little, 2005).

Finally, the fifth challenge is to interpret and use alternate assessment results. Until states set policy on how alternate assessment results can be reported and offer guidance on how to make productive use of assessment results, little school improvement planning for students with significant disabilities can take place (Thurlow, Elliott, & Ysseldyke, 1998). These challenges are important for educational leaders to consider.

Connections to a State and District Leadership Assessment Theory of Action

To address these challenges, research offers ideas about policies and practices that may foster greater attention to the scope and quality of learning opportunities available to these students, and ultimately encourage better post-school outcomes for them. School system leaders who wish to make teaching and learning of students with significant disabilities part of their learning improvement agendas may take actions that will influence educational renewal at the student, staff, or systems levels (Knapp, Copland, Ford, Markholt, McLaughlin, Milliken, & Talbert, 2003). To realize these potential benefits, leaders' actions may be guided by an "assessment theory of action" that identifies key leverage points, addresses anticipated challenges, and takes advantage of opportunities that arise in assessment arenas within the context of school reform.

An assessment theory of action may include strategies along several different "pathways" which converge on the teaching and learning of the students in question. The literature includes suggested leadership actions in several areas that are likely to improve learning for all students as well as for those with disabilities. Leaders are likely to implement steps in more than one area simultaneously, as they try to build systems and a culture of support for the constructive use of assessments, including alternate assessment.

A first area of leadership action in an assessment theory of action is the explicit attempt to promote full inclusion in assessments (Elliott, Braden, & White, 2001). IDEA '97 required participation of all students in state and district-wide assessment programs.

Once the principle of full inclusion is established, a second leadership action involves developing strong public support for fair test implementation for students with disabilities (Almond, Lehr, Thurlow, & Quenemoen, 2002; Elliott & Thurlow, 2001;

Linn, 2000). As one example, leaders may monitor the appropriate implementation of assessments and limit ineffective assessment practices.

A third area of leadership action is taking steps to ensure appropriate communication and understanding of assessment results. Elliott, Braden, and White (2001) state that it does no good to have performance scores for all students if the instructional leader does not understand the meaning of the test results.

Fourth, the literature surrounding assessment strategies for educational reform also underscores the appropriate *use* of assessment data, and leadership actions can play a central role in improving how assessment is brought to bear on teaching and learning. Testing will improve the nature of education only if educators use test results effectively (Haladyna, 2002; Sharkey & Murnane, 2003).

Using the leadership for learning framework provided by Knapp and colleagues (2003) and an assessment theory of action, state and school district leaders in Washington might find opportunities for improving the quality of teaching and learning for students with significant disabilities, in five areas:

- Exploring the meaning of "full inclusion" in state assessments.
- Using the implementation of alternate assessments as a vehicle to raise teacher expectations for students with significant disabilities.
- Using the implementation of alternate assessments and interpretation of results to promote greater access to the general curriculum.
- Aligning curriculum, instruction, and alternate assessment to academic content being tested.
- Finding ways to use alternate assessment data to inform and improve teacher instructional practices.

Methodology and Process of Inquiry

In phase one of this study, all existing state surveys for educators involved WAAS portfolios were examined; responses from teachers were analyzed. The 2003 WAAS portfolio survey distributed at fall workshops was the first state attempt to capture perceptions of specific impacts of the alternate assessment on instructional programs and student learning.

The design of phase two of this study was intended to gather evidence of the actual implementation and impacts of the portfolio on the programs for three students. The first method of inquiry in the second phase was to conduct interviews with parents and teachers of seventh grade students who participated and met standard in the WAAS portfolio in Reading, Writing, and Mathematics in 2004. Each teacher and parent in the study was interviewed separately using the 60 minute semi-structured interview protocols by the end of June 2005. The second method of data collection was observations of the students in their classroom learning environments. Three 30-minute lessons were closely observed over a two-month period in 2005, noting both the teacher's instruction and student's behavior during the standards-based activity. The third data collection method for each case study consisted of archival reviews of three IEPs: the current IEP in force and the two IEPs chronologically preceding the current IEP. Additionally, teachers shared the scored portfolios from 2004 and evidence of targeted IEP skills from the portfolio entries was also collected.

Findings

Findings from the two phases complemented each other, with the survey results

setting the stage for the closer examination and inquiry made possible in the case studies. The cross case analysis generated additional findings for educational leaders to consider. The findings of each phase of the research study are summarized below.

Teacher Survey Analysis

The phase one analysis concentrated on items from educator surveys, conducted in the fall of 2003 during WAAS portfolio training workshops, reviewing items that concerned teacher perceptions of educational change when implementing the WAAS portfolio. Analysis of these items focused on the following areas: perceived changes in student access to the general curriculum; changes in linking of the IEPs to the EALRs or EALR Extensions; indicators of alignment between what is taught and what is tested on the WAAS portfolio; and student application of IEP skills and student achievement of skills with different people, in different settings, etc.

The analysis for all teacher respondents highlights the likelihood that *implementing alternative assessment has prompted "educational changes" for students with significant disabilities, while not revealing what these changes might entail.* More teachers perceived some level of change on items concerning alignment between curriculum, instruction, and assessment than on other survey items regarding educational changes. Second, survey analyses indicate that both experienced portfolio teachers and those new to the portfolio indicated that *participation in the WAAS portfolio assessment and professional development were the most frequently reported reasons for educational changes* on all survey items. Yet none of the survey items can provide an in-depth explanation of what changes have occurred, how any changes have been implemented,

and what specific factors may have influenced or caused those changes to occur.

Case Study Analysis

Case studies undertaken during phase two of the study provided details into how teachers had implemented the alternate assessment portfolio for three students with significant disabilities during their seventh grade year. Because the WAAS portfolio assessment represented a fundamental shift from functional to more academically-based instruction, the case study inquiries were intended to document any changes in academic programs for these students, especially in terms of greater access to academic content. The students exhibited different patterns of disability; their teachers had varying exposure to and experience with alternate assessments:

- Case Study A. Andrew, a significantly disabled, 13 year old student with a diagnosis of autism and mental retardation, submitted a WAAS portfolio. He was bused to the only self-contained middle school classroom in school district A. The teacher had over five years experience with the WAAS portfolio assessment and served as a member on state advisory and professional development committees, as well as serving in leadership roles at state portfolio scoring institutes.

- Case Study B. Jennifer, a legally blind student with significant disabilities, submitted a WAAS portfolio last year. Jennifer is currently 14 years old, in the eighth grade, and her primary mode of communication is verbal. Her self-contained classroom, similar to ones in each of three middle schools serving seventh and eighth graders in school district B, also serves other students who attend only one or two hours per day. Her teacher was new to implementing the portfolio assessment last year and had attended only one state-sponsored WAAS training session.

- Case Study C. Charles, a student with multiple disabilities, is nonverbal and communicates using switches, eye gaze, and facial expressions. He is a 15-year-old eighth grader with no ability to walk and has limited control of his body. Charles' classroom is situated in one of two grade 6-8 buildings in school district C. His teacher had implemented the WAAS portfolio for two previous years and she had attended many WAAS

workshops and professional development opportunities, including portfolio scoring institutes.

The evidence collected during interviews, classroom observations, and archival reviews of IEPs in these cases also focused on the possible effects of the WAAS portfolio on educational changes in the classroom. Findings from cross case analyses are summarized below.

First, regarding specific steps taken by the three teachers to implement the portfolio for one specific student in their classrooms, teacher interviews and observations appear to confirm that *experience with the portfolio appears to help the teacher to integrate alternate assessment activities into daily routines.*

Second, all three teachers stated that they changed the way they wrote the IEPs following portfolio training and implementation, which may or may not provide greater access to the general curriculum. In other words, the portfolio experience, by itself, did not necessarily show these teachers what they could do to enrich the academic dimensions of their students' environments. Here, the case study data support a second finding: *regardless of experience with portfolio assessment, the teachers may not understand <u>how</u> to provide instruction in academic content for students with significant disabilities.*

Related to this pattern, the case study data demonstrate a possible mismatch between the alternate assessment evidence, IEP goals, and classroom instruction and assessment. This raises two possible influences on the content of what is taught to students with significant disabilities: (1) teacher understanding of the academic curriculum and how to align their instruction with the alternate assessments; and (2)

teacher preferences regarding what should be taught to such students. Thus, a third finding asserts that: *how teachers viewed the connections between evidence in the portfolio entries and the teaching and learning going on in the classroom may influence whether the teacher will make any changes in providing greater access to the general curriculum.*

Fourth, concerning any changes in the students' achievement of IEP skills linked to state standards, the students in all three cases appeared to be making progress on IEP skills, and parents and teachers agreed that gains had occurred. However, since the IEP goals were often not aligned to academic content and academic skill data was not collected in two cases, it is difficult to discuss impacts of alternate assessment on academic achievement for these students. It may also be hard for teachers to demonstrate to themselves, or others, that students are really understanding academic knowledge or skills due, in part, to student limitations in communicating what they have learned. Thus, a fourth finding is this: *student achievement toward meeting state standards in academic content may depend on viable communication systems and methods for collecting data about student learning in academic content for students with significant disabilities.*

Teachers in these cases also seemed to vary in their understanding of the uses of assessment data to improve learning. This leads to a fifth finding: *teachers' ability to use alternate assessment and WAAS performance data may determine, in part, the level of instructional and programmatic changes focused on increasing student academic learning.*

The final research question for the case studies focused on discerning factors, including the implementation of alternate assessments, which may account for any

program or student performance changes. The level and type of district commitment and support seemed to influence the impact of the portfolio on educational changes in these case studies. The sixth finding is as follows: *fulfilling reform expectations in classrooms depends, in part, on school district commitment to implementing alternate assessment as part of an overall program design for students with significant disabilities.*

Conclusions and Implications

The intent of this research was to inform state, school district, and teacher practice based on an exploration of state surveys and three teachers implementing the alternate assessment in order to promote high student achievement. While this kind of study cannot offer definitive conclusions about all teachers' response to alternate assessment policies, nor the impacts of their assessment implementation on the full range of students with significant disabilities, its findings raise provocative possibilities for leaders at state and local level. Specifically, the findings provide clues about leadership action, framed by an "assessment theory of action" and responsive to local settings and contexts, that could help local educators improve teaching and learning opportunities for these students.

Specifically, findings in this study may suggest leadership actions within the context of a school and school district in five areas previously mentioned in discussing the assessment theory of action. Figure 1 below provides some examples of leadership action for consideration within a particular context.

1. Findings Related to Full Inclusion	Example of Leadership Action
Portfolio experience seems to help teachers with embedding alternate assessment activities into classroom routines and with fostering greater student involvement in the portfolio	Support opportunities for teachers new to the portfolio to collaborate with their more experienced colleagues about embedding alternate assessment procedures into instruction
School district commitment for implementing alternate assessments as part of the program design for students with significant disabilities may help to fulfill higher learning expectations	Arrange for early release of students in self-contained classrooms so teachers and other providers could have collaborative planning and time for program review
2. Findings Related to Raising Expectations	**Example of Leadership Action**
Teachers with more portfolio experience may be more likely than teachers new to the portfolio to view the alternate assessment process as leading to changes in access to the general curriculum and instruction	Support coaching opportunities for teachers new to the portfolio to see examples of lessons designed to teach academic content from experienced portfolio teachers
Teachers may not understand how to provide instruction in academic content, regardless of portfolio experience	Refine state professional development and scoring training to address best practices for academic instruction
Teachers may focus their expectations and instructional efforts on student mastery of functional skills	Facilitate dialogue about high expectations and access to the general curriculum to the maximum extent possible
3. Findings Related to Providing Greater Access to the General Curriculum	**Example of Leadership Action**
Teachers' views of the WAAS portfolio evidence in connection with what they are teaching and their students' IEP goals may influence the changes toward greater access	Conduct surveys/focus groups to learn how teachers link academic instruction for students with significant disabilities with IEP goals and the portfolio evidence
Teachers face challenges when assessing academic learning for students who have limited movement or are essentially nonverbal	Explore how teachers are collecting the student performance data during observations; Garner resources to improve student communication systems
4. Findings Related to Alignment of Curriculum, Instruction, and Alternate Assessment to Academic Content	**Example of Leadership Action**
Possible misalignment between skills written by the teacher in portfolio and IEP goals; apparent lack of evidence of academic content in standards-based lessons and the portfolio; or weak links to academic content through access skills	Identify alignment issues and reasons for the misalignment; Promote research/book study groups to identify best practices and examples of academic instruction for students with significant disabilities
5. Findings Related to Using Data to Improve Instruction and Student Learning	**Example of Leadership Action**
Portfolio data collection helped teachers to monitor the students' progress	Collect data on the frequency of progress monitoring and achievement of IEP goals
Teachers planned for activities in other places so students could demonstrate IEP skills in different settings and contexts	Document changes in assistive technology use; Collect data on frequency of data collection in other settings
Some teachers not using WAAS portfolio scores to inform instruction	Facilitate teacher reviews of scored portfolios and deeper examination of assessment data and evidence

Figure 1. Examples of Potential Leadership Actions Related to Study Findings

Limitations

The findings and conclusions of this study reflect several limitations. First, the results of the study draw on a relatively small number of teachers, who voluntarily participated in state-led workshops or who volunteered for this investigation. This means that, across the full range of students with significant disabilities in Washington state and the population of teachers who serve them, there may be other ways that the WAAS system has been implemented and other effects it may have achieved. The findings should be thought of less as statements about the population and more as statement of conceptual connections between the alternate assessment policy, its implementation, and its possible effects under different local conditions.

A second limitation derives from the difficulty of attributing local changes in program or performance to the influence of WAAS alone, or even primarily to the alternate assessment. In other words, this study was based on teachers' testimony, triangulated with classroom observations and documentary records, and it is possible to infer that effects can be attributed to multiple sources. Changes due to student maturation or changes in district policy also may have had an effect on the students' program changes.

A third limitation reflects the particular timeframe in which the study took place, in relation to recent federal developments in the area of alternate assessment for students with significant disabilities, which may alter the dynamics of implementation response somewhat in the future. Regulations for IDEA 2004 are due to be finalized this year and may provide reasons for changes in state assessment practice. As more specific guidance emerges from the federal government on alternate assessment, teachers may respond

differently, or they may begin to see connections between assessment and classroom practice in a different light. In spite of these limitations, the results and findings from this study may inform teacher and leader practice in assessment.

Implications for Practice and Next Steps for Research

This study provides some of the first evidence of how alternate assessment portfolios are being implemented in Washington. The research findings may be situated within an assessment theory of action which implies some leadership action and considerations for assessment practices. These case study findings and survey results raise questions about what leaders may do to enhance the usefulness of the alternate assessments for students with significant disabilities. In summary, several observations arising from the study findings are offered to educational leaders for consideration within their local settings:

- Leaders, understanding the potential impacts of district assessment policies on teachers, may consider more inclusive practices to guide program improvement efforts for all students.

- Before taking any steps designed to raise teacher expectations, educational leaders may first consider finding out what goals and outcomes teachers have in mind for their students with significant disabilities, in order to select appropriate actions to increase student expectations.

- Educational leaders may want to find out how teachers are collecting student performance data and what challenges arise when assessing academic learning for students who may have limited modes for expression.

- Leaders may consider identifying how teachers make sense of curriculum and instruction with alternate assessment, as well as examine the level of programmatic access to the general curriculum for students with significant disabilities, before implementing actions to improve alignment.

- State and school district leaders may note the impacts of implementing the

elements of alternate assessment on teacher practice, as well as provide information about program success or need for improvements based on alternate assessment performance results.

Future research is also needed to address student needs for those with significant disabilities, as well as to support teachers in implementing the alternate assessment portfolio in Washington. Research may yield better understanding of teacher perceptions of, and engagement with, the alternate assessment process; studies can also explore further what methods teachers use to align assessment and instruction to state standards, and probe more deeply into contextual assessment and accountability factors within local school districts that affect the linkage between assessment and instruction. Another area, worth considering for case study work or future surveys, is researching perceived changes in linking IEPs to state standards in response to federal mandates.

The promise of alternate assessment to produce more inclusive policies, create higher expectations, increase access to the general curriculum, improve instruction, and extend learning for students with significant disabilities has yet to be fulfilled. Until more case studies and action research surrounding alternate assessment are conducted in various state and school district contexts, the impacts of alternate assessment may remain as individual and varied as the students themselves. There is hope that through research and leadership action, continued efforts to include all students in the benefits of school renewal will come to pass.

DEDICATION

I would like to dedicate this dissertation to my husband, Keith. He has always supported me in achieving the goals I have set. He has endured missed vacations, spent weekends alone, and made many sacrifices too numerous to recount. He has patiently waited for me to finish writing this dissertation to my satisfaction and for all these things, I am eternally thankful.

CHAPTER 1

Introduction: Challenges in Large-Scale Assessment for Students with Significant Disabilities

The thrust of federal and state education legislation in the last decade has focused on the goal of improved student learning. Students with disabilities are included in these school reform efforts in terms of access to the general curriculum standards, access to assessment programs, and inclusion in accountability systems. The Individuals with Disabilities Act amendments (IDEA, 1997; IDEA, 2004) charged states to determine academic content standards for all students and to find ways to assess student progress toward these academic goals (Kampfer, Horvath, Kleinert, & Kearns, 2001). A small number of students with disabilities, however, had not been included in school reform activities due to the severity of their disabilities. These students generally were taught a separate life-skills curriculum and they were unable to participate in paper and pencil assessments. The IDEA required states to develop and implement alternate assessments linked to state academic content standards for students with significant disabilities. Therein lies the challenge for states, school districts, and teachers: to implement an alternate assessment targeting reading, writing and mathematics content for students with the most significant cognitive disabilities who may not be expected to read or write at all or ever be able to perform numerical operations.

This document presents the results of a study that investigated the implementation of alternate assessments and the effects of that implementation on teachers and students in Washington State. This investigation endeavored to better understand how teachers

were carrying out the federal requirements for assessing students with significant disabilities in academic content areas. The research inquiry also focused on studying the effects of implementing the alternate assessment on teachers' actions in providing access to the academic curriculum for students with significant disabilities. Finally, the study was designed to gather evidence of any effects from implementing the alternate assessment on the students themselves.

This introductory chapter is organized in the following manner. An overview of the problem of practice is discussed from the perspective of national and state assessment policy and with emphasis on the inclusion of students with significant disabilities in these assessment policies. The second section summarizes the six inquiry questions which guided the two-phase investigation of the impacts of alternate assessments in Washington on students with significant disabilities. Thirdly, the introductory section provides the purpose and significance of the research for school district leadership and for teachers. The final section of the introduction provides an overview of the organization of this report.

Overview of Problem of Practice

Schools have been held accountable for their performance for most of this century (Erickson, Ysseldyke, Thurlow, & Elliott, 1998). Measures of accountability in the past have included measurement of how much money is spent, enrollment, and number of days of instruction. During this current reform movement, accountability has shifted from evidence for providing services to a focus on student outcomes. The Elementary and

Secondary Education Act reauthorization of 1994 (ESEA) was aimed at improving student learning by requiring states to develop a set of standards in Reading/Language Arts, Mathematics and Science. The reauthorization also required states to develop assessments of these standards at three benchmark levels: elementary, middle years, and high school. The 1994 reauthorization shifted school and district responsibilities from delivering curriculum for disadvantaged students to accountability for performance of all students, including students with disabilities.

IDEA amendments were adopted in 1997 by Congress, in part, to support the requirements of the 1994 ESEA reauthorization. Provisions were added in IDEA amendments to afford students with disabilities access to the general curriculum to the maximum extent possible. Federal guidance following the issuance of IDEA amendments also stressed that alternate assessment results be reported for the same content areas as those on the general assessment. ESEA accountability requirements are clearly linked to state standards, "Alternate achievement standards must be aligned with the State's academic content standards (i.e., include knowledge and skills that link to grade-level expectations), must promote access to the general curriculum, and must reflect professional judgment of the highest learning standards possible for the group of students with the most significant cognitive disabilities" (U.S. Department of Education, 2004, p. 15).

IDEA also required that states assess the performance of all students toward meeting state standards in the general curriculum. For those students with disabilities who were unable to participate in the general assessment, even with accommodations,

states were to develop alternate assessments by July 1, 2000. Reauthorization of IDEA in 2004 (U.S. Department of Education, 2005) reinforced the notion that alternate assessments be aligned to the state's challenging academic content standards and yield results in the same academic content areas that were tested on the general assessments. These new rules challenged states, including Washington, to reexamine assessment participation guidelines for state testing as well as the content of alternate assessments that had been developed.

State assessments measuring student achievement toward meeting state standards are also the primary method to be used to measure school success under the ESEA No Child Left behind Act of 2001. The role of state assessments in accountability systems has caused school district and state leaders in Washington to question the success of our educational delivery programs in terms of high performance for *all* students. Specifically, school and district leaders were to be held accountable for the overall population and student subgroups, including students with disabilities. This has led to challenges for assessing students with disabilities in meeting academic content standards, especially those with the most significant disabilities. Washington State leaders have attempted to address these federal requirements and challenges in developing and revising assessment policies and practices during the school reform movement.

Assessment Policy in Washington State

In Washington State, the school reform efforts began in the early 1990's. The Washington Assessment of Student Learning (WASL) was developed to measure

students' performance toward meeting new state standards for achievement. Most students with disabilities participated in the WASL and were included in the state accountability system. In response to federal NCLB requirements for an alternate assessment as part of the accountability system, the Washington Alternate Assessment System (WAAS) was developed. The Washington alternate assessment portfolio was designed to provide a method for holding schools and districts accountable for the performance of a small number of students with significant disabilities in academic content areas. While Washington's reform goals were centered on preparing students to be caring, skilled citizens for the 21st century, both NCLB and IDEA influenced the development and implementation of the WASL and WAAS assessments in Washington.

The development of the WASL assessment was part of a larger reform movement initiated by business leaders and other stakeholders in Washington State. House Bill 1209 redefined the basic education act in 1993 to incorporate four learning goals intended for all students. State standards, Essential Academic Learning Requirements (EALRs), were created in eight subjects and were designed to help students reach high levels of achievement in the following areas: Communication, Reading, Writing, Mathematics, Science, Social Studies, The Arts, and Health and Fitness. The goals for state standards were to set clear expectations for student instruction and achievement and to guide development of assessments to measure that achievement.

The statewide WASL testing program began to develop content area assessments targeting the EALRs in Communication, Reading, Writing and Mathematics to provide broad achievement indicators for the state, districts, schools, and individual students in

1994. The WASL was first piloted in the spring of 1996 in grade 4 and participation in these state tests for grades 4, 7, and 10 became mandatory in the 1998-1999 school year. In 1997, a group of stakeholders drafted the first set of participation and testing accommodation guidelines for special populations. These assessment plans met federal deadlines and the first accountability report was submitted to the ESEA Title I office in Washington, D.C.

The Washington Alternate Assessment was developed and piloted in 2000 in time to meet the IDEA implementation requirements. Stakeholder groups reviewed and revised the state participation guidelines to include procedures for determining who would appropriately participate in alternate assessments. While IDEA prohibited use of specific disability category language in state guidelines, the Washington document described alternate assessment participants as those students with significant disabilities who required extensive, individualized instruction in order to acquire skills and who were unable to take paper and pencil tests. The federal government provided further clarification of who and how many students with disabilities should participate in alternate assessments via the ESEA rule issued in December, 2003, by defining the alternate assessment participants as students with significant cognitive disabilities and limiting the use of alternate assessment results in accountability calculations to one percent of the tested population.

Students with disabilities who participated on the WASL, with or without accommodations, were included in the state accountability system. With the advent of IDEA requirements to include all students with disabilities in assessment and

accountability systems, policy makers in Washington deliberated on questions of how to include those students who had significant disabilities in the required assessment areas of reading, writing, and mathematics. Although these students often had programs based on nonacademic behavioral goals and functional living skills and student performance was reported to parents, educational systems would now be held accountable for publishing academic assessment results to the public and for improving these students' outcomes.

State officials in Washington State encountered challenges in implementing alternate assessments for students with significant disabilities due to the disconnect between what was taught and what was to be tested. The Essential Academic Learning Requirements (EALRs) did not include functional learning requirements that might be readily applied to students with significant disabilities. Several special education advocacy groups pressured the state to revise the Essential Academic Learning Requirements (EALRs) to include functional, vocational and social skill areas. Teachers also saw the alternate assessment as a state mandate and not as instructional feedback for teaching students with significant disabilities. Due to these challenges, some school district leaders recommended that other alternate assessments be developed.

Following the implementation of the WAAS portfolio regional training sessions in the fall of 2000, a new stakeholder group was convened. They recommended that teachers be allowed to use any standardized assessment to evaluate student progress on academic content. This recommendation was adopted and many students with significant disabilities were assessed and reported during 2001 and 2002 using individual IEP goals or eligibility assessments, rather than participating in the WAAS portfolio which was

linked to the EALRs. Individualized Education Program (IEP) team members were confused about which alternate assessment options were appropriate for which students and under what conditions. Teachers reported commercially available test (CAT) scores to the state that were unclear or had limited meaning, such as providing raw scores or age equivalents, instead of standard scores as specified in the assessment instructions. Some school districts did not implement alternate assessments at all in the first year. WAAS portfolios were scored and returned to teachers but no achievement standards were set until two years later. This meant that student performance results from various assessment instruments were not comparable and could not be aggregated or reported to the public. Thus, performance indicators for students with significant disabilities participating in alternate assessments in 2001 were not available for school improvement planning.

Although some of these issues have become less pronounced over time and the CAT alternate assessment option discontinued, several implementation problems still remained. Major challenges that still exist today in regards to implementing alternate assessments in Washington are exclusion from testing, implementing assessments inappropriately, nonalignment of curriculum to the assessments, and confusion as to what alternate assessment scores mean.

> "The purpose of alternate assessments in state systems is not to address individual accountability measures, but rather, to increase the capacity of large-scale accountability systems that create information on how a school, district, or state is doing in terms of performance" (Thurlow & Thompson, 1999, p.6).

This statement seems to suggest that school, district, and state leaders pay close attention to both the implementation and the results of alternate assessments in order to ensure that

teachers provide instruction in academic content and to monitor academic learning for students with significant disabilities. The challenges of alternate assessment in Washington were also included in the larger debate of using state assessments to hold school districts accountable.

The value of conducting large-scale state testing programs as a measure of accountability for student learning has been widely debated during the current reform movement. Some have suggested that using a single test is insufficient evidence to determine the success or failure of a school (Clark & Wasley, 1999; Elliott, Braden, & White, 2001; Sirotnik, 1999). Some educational researchers found that schools and districts can raise test scores without improving student learning by excluding certain students (Allington & McGill-Franzen, 1992). In consideration of these concerns, the state has moved ahead with implementing an inclusive assessment program while emphasizing the need for alternate assessments as an essential component of the system.

Other educational researchers and writers argue that inclusive state assessments can be one indicator of the efficacy of the school and district educational systems (Browder, 2001; Elliott, Braden, & White, 2001; Krentz, Thurlow, & Callender, 2000). In the state of Washington, all students' scores on state assessments, including the alternate assessment portfolio, are reported and included as a primary piece of evidence in determining if schools are making adequate yearly progress, which may affect the rewards or sanctions that each school and district receive. However, the decision to base the state accountability system primarily on WASL and WAAS assessment performance in Washington will not be debated in this inquiry. Rather, the focus of this study is based

on the foundational belief that involving students with significant disabilities in assessment systems is a critical part of an inclusive education and participation in assessments is essential for an equitable educational accountability system (Elliott, Braden, & White, 2001).

The Focus of Inquiry: Alternate Assessment System for Students with Significant Disabilities

The alternate assessment method chosen in Washington incorporated a body of evidence into a portfolio of student progress linked both to individual learning goals and academic content standards for students with significant disabilities. The alternate assessment portfolio was piloted in 2000 and became operational for the 2000-2001 school year as required by IDEA 1997. Regional training sessions were conducted drawing hundreds of staff in special education programs. These training sessions were attended by school district special education directors who were upset that the state intended to assess students with significant disabilities. They also decried the lack of appropriate assessment options for students with mild and moderate disabilities. Teachers attending the sessions challenged the requirement to assess students with most significant disabilities in reading and mathematics. Only after WAAS assessments were operational for two years and included in the state accountability system in 2002-2003 did state and school district leaders begin to fully recognize the challenges of implementing WAAS. The questions and concerns expressed to state officials in these early years provided the catalyst for this study. Four areas of concern voiced about alternate assessments are

briefly summarized below.

Federal and state accountability laws and policy have challenged thinking about assessments, teaching and learning for all students. Inclusion of all students in state assessment and accountability systems, including those with significant disabilities, has generated the first set of questions for policy and practice in Washington. Development and implementation of appropriate alternate assessments are the second challenge in actualizing inclusive assessment systems. Thirdly, issues have also arisen around appropriate instructional programs for students with significant disabilities, particularly in regard to the relationship between the specially designed instruction contained in individualized education programs (IEPs) and the standards-based academic curriculum tested in an alternate assessment. Finally, as alternate assessment portfolios generated performance results, stakeholders and policy makers in Washington have asked questions about how to use alternate assessment data to document student learning, to provide feedback for instruction, and to inform change toward more equitable learning systems. These teacher and district administrator questions and challenges provided the foundation for the inquiry into alternate assessment described below.

Inquiry Questions Guiding a Two-Phase Investigation

The need to more fully understand the implementation and impacts of the alternate assessment process for students with significant disabilities in Washington was prompted by questions posed at state regional workshops and feedback through annual surveys conducted by the state. Additionally, the relatively short history of standards-

based alternate assessment in IDEA 1997 meant that research in the field was primarily concerned with refinement of state assessment policy and development of alternate assessment methods. Kleinert, Kennedy, and Kearns (1999) found that teachers continued to focus their instruction for students with significant disabilities on functional skills even after the Kentucky alternate assessment in reading, writing, and mathematics had been implemented for several years. Articles and research devoted to teacher practice in standards-based instruction for students with significant disabilities proved difficult to find or was non-existent (Browder, Spooner, Algozzine, Ahlgrem-Delzell, Flowers, & Karvonen, 2003). In light of the limited volume of national and state research on emerging alternate assessment practice, this inquiry was conceptualized as a means to gain some understanding of how the alternate assessment was being implemented in Washington and how the WAAS may affect teacher practice. The purpose of this inquiry led to several research questions and the two phase approach to this research.

This study consists of two parts. First, the study analyzed existing data from Washington state-wide surveys of perceptions about implementing the WAAS portfolio conducted in the fall of 2003. While state department of education staff conducted annual surveys of teachers and administrators attending WAAS training sessions, the 2003 survey addressed the major challenges of teaching and assessing students with significant disabilities in academic content areas, rather than solely asking logistical implementation questions about the alternate assessment. In addition, items related to perceived impacts of the WAAS portfolio on teacher practice and student achievement were included for the first time in 2003. The survey analysis was narrowed to evaluating teacher responses on

selected items in order to focus on the perceptions of those individuals closest to changes and impacts in teaching and learning for these students, particularly in academic content.

The phase one research questions follow. The first research question focused on survey responses regarding teachers' perceptions of changes in student participation in standards-based activities in reading, writing, and mathematics after implementing the portfolio assessment:

1) Based on teacher perceptions, were there any changes in the access to the general curriculum for students with significant disabilities following the implementation of the WAAS portfolio alternate assessment?

This question was prompted by the apparent disconnect between what was primarily taught (functional skills) and what was assessed on alternate assessments (academic skills) in early survey work. The second research question focused on changes in teaching and learning of academic content.

2) Were there any perceived changes in student programs or achievement in the general curriculum?

This research question targeted teacher survey responses about instructional changes and success of students meeting IEP goals linked to state standards as well as the perceived reasons for any changes.

To answer these questions, the study analyzed the 2003 teacher survey data on six items to determine teachers' perceptions of changes in 1) access to the general curriculum, 2) student achievement, and 3) reasons for any changes in programs or student achievement after implementing the alternate assessment.

Because teacher perceptions alone can yield only partial understanding of the effects of implementing the alternate assessment, the second phase of the research included an in-depth examination of three students who participated in the alternate assessment in 2004. While the second phase of the study examines a small number of cases, care was taken in selecting the cases to represent differing levels of teachers' experience in implementing the portfolio and differing types of students with significant disabilities. This investigation gathered descriptive evidence of the implementation of the alternate assessment portfolio and the individual programs of the students as they related to the general curriculum. This phase of the study also sought to develop a deeper understanding of individual changes in student access or progress toward state standards after involvement with alternate assessments. Both demographic and contextual information was gathered in order to frame the case studies. These three case studies included interviews with parents and teachers, student observations, and a review of the students' previous and current IEPs and WAAS portfolios. These case studies permitted the following research questions to be investigated:

3) What were the specific steps taken by teachers to implement the alternate assessment portfolio for three specific students?
4) In what ways, if at all, did these students experience a programmatic change in access to state academic content standards following implementation of this alternate assessment?
5) What changes, if any, did these students experience in the achievement of IEP skills that are linked to state standards?

6) What factors, including the implementation of alternate assessments, may account for any program or performance changes?

This phase of the study was designed to provide some evidence that may be significant in addressing the challenges for both school teachers and administrators of including students with significant disabilities in state assessment programs.

Significance of the Research

The primary significance of this study is to accumulate evidence that will contribute to the knowledge base about judgments about the validity of the WAAS portfolio assessment. "Validity refers to the adequacy and appropriateness of interpretations made from assessments with regard to a particular use" (Elliott, Braden, & White, 2001, pp. 17-18). This means that by checking both teachers' perceptions through surveys and actual case studies, the study will help to show how the alternate assessment portfolio was implemented in Washington State and whether the interpretations and use of the portfolio assessment influenced changes in teacher practice or student outcomes. Many descriptive studies have been conducted about the nature or methodology of alternate assessments, but not about the nature or effects of conducting them (Browder, Spooner, Algozzine, Ahlgrem-Delzell, Flowers, & Karvonen, 2003). The data collected during this study should shed light on how three students with significant disabilities were included in the state assessment system and how the alternate assessment portfolio was implemented by three teachers with varying levels of alternate assessment experience, as well as providing a look at the school district conditions and contexts

under which each teacher was operating.

Secondly, this investigation focused on any possible effects of implementing the alternate assessment portfolio on teachers and students. Teachers in Washington have noted in previous perception surveys the disconnect between what they teach and what is assessed at the state level for some of their students with significant disabilities. This inquiry includes an analysis of 2003 survey data to gather perceptions about any instructional changes teachers had made following implementation of the WAAS portfolio and any perceived changes in student outcomes. Evidence collected through case studies should provide insights into possible differences in changes in teacher instructional practice or student performance in these three cases. This study is also designed to collect evidence of what these three different teachers believe were the reasons for any changes in the writing of IEPs, the selection of curriculum and delivery of instruction to address alignment challenges between instruction and standards-based assessments for their students.

Third, the results of this study are intended to inform state and school district leadership actions to support the appropriate implementation and use of the WAAS portfolio assessment in Washington. This area for inquiry explores and informs a major challenge for educational leaders in implementing the alternate assessment in order to improve student outcomes (Elliott & Thurlow, 2001). If changes in teacher expectations or instructional practices can be documented after implementing alternate assessments, the information may provide direction for state and school district administrators in using alternate assessment to support learning improvement goals in the classroom. The results

of this study may suggest leadership actions such as focusing teacher professional development efforts to support higher expectations for all students. An example for leadership action in providing greater access to the general curriculum might be for school district leaders to involve teachers of students with significant disabilities in deep curriculum alignment activities. This research may influence future state leadership actions to assist school district staff in understanding the appropriate use of alternate assessment data to improve student learning in school districts in Washington. These and other potential leadership actions will be addressed in light of the purpose of this inquiry, current literature on alternate assessment and within the context of state and school district environments.

Organization of This Report

These research questions should not be studied in isolation, however. A body of literature framing critical concepts of inclusion and research in assessment for students with disabilities has already been documented. A discussion of several problems of practice surrounding large-scale assessments in light of this relevant literature will help to focus this inquiry and contribute to the significance of such a study in the next chapter. Following the second chapter summarizing the relevant research and supporting literature, chapter three will provide the methodology and procedures for conducting the study and the rationale for the methods used. Chapter four will summarize the research findings for the phase one survey analysis and the case studies in phase two of the study. A cross-case analysis and discussion of the findings will complete the chapter. The fifth

chapter will cover conclusions and implications of the study including limitations and next steps for research. Survey instruments and case study protocols are included in the appendices for reference.

CHAPTER 2

Critical Concepts and Informing Literature

This chapter will summarize research on leadership and alternate assessment in the context of school reform. The concept of educational reform is not new. However, with the implementation of the No Child Left Behind Act of 2001 (2002), the context for state educational leadership and local school district leaders has changed. Requirements to create challenging academic content standards for learning, to include all students in state and district assessments, and to hold local schools and districts accountable for student performance are just some of the provisions of this law. Fullan (2003) notes that even if you can't change the demographic profile of a school, a change in context has the potential to change a situation or behavior. In this new environment of greater accountability for increasing student performance, school leaders are under pressure to implement changes for improving student learning.

In this chapter, an overview of challenges for educational leaders in applying large-scale assessment policy and practice to students with disabilities will be provided first. Next, informing literature surrounding large-scale assessment of students with disabilities will follow with emphasis placed on specific issues for students with significant disabilities. Finally, connections will be drawn between the literature and an assessment theory of action for educational leaders at state and school district levels in Washington.

Challenges of Assessing Student Learning for Educational Leaders

The difficult problem for leaders lies with the questions of what and how to improve the school system in the context of educational change. The most recent school reform movement, the No Child Left Behind Act (2002), asks school district leaders to change current practice so that all children will meet high academic standards. Leaders may be challenged in trying to define the mission of school reform, in changing current practice, in implementing assessment and accountability provisions, or in addressing concerns of the public. The initial question, however, that must be addressed is defining what school reform means to educational systems.

Exploring the context and definition of educational change is the first order of business. Some theorists would question whether 'reforming' education is the right term to use (Goodlad, 1999; Soder, 1999). Sirotnik (1999) defines the complex task of school renewal as "the process of individual and organizational change, about nurturing the spiritual, affective, and intellectual connections in the lives of educators working together to understand and improve their practice" (pp. 607-608). Clark and Wasley (1999) characterize continuous renewal as members in the school community "working together to answer fundamental questions about how schools fulfill their essential mission" (p. 591) to produce citizens for an equitable, democratic society. Each of these and many other conceptualizations for addressing school improvement efforts are grounded in how leaders view the educational systems which they oversee.

Once educational leaders have developed the vision and mission for school reform, they may be challenged to implement changes to the school culture and

assessment practices. Creating a culture of continuous improvement starts from the inside out and is a collaborative enterprise (Fullan, 2003; Reeves, 2004; Zmuda, Kuklis, & Kline, 2004). Zmuda and colleagues (2004) assert that only in a competent system can educators think of their collective work as contributing to a culture of continuous school improvement. Barth (2002) states that innovative practices, high standards, and high stakes tests will remain superficial if teachers and administrators fail to implement changes in the culture of the school. Barth (2002) goes on to say if instructional leaders are uniformly examining school culture and working to transform the culture to one that sustains human learning, then students will perform well on standardized assessments. Educational leaders must try to understand the complex interaction of school culture with learning in order to determine what actions to take.

Leaders may also be challenged in carrying out the assessment and accountability provisions of school reform. The No Child Left Behind Act (2002) requires that school districts implement assessments based on challenging standards in reading and mathematics. While this may seem like a feasible task, states have found implementing the testing program to be difficult, particularly for some groups of students. Students with disabilities may have barriers which cannot be accommodated on a state test (Thurlow, Elliott, & Ysseldyke, 1998). The percentage of students with disabilities participating or meeting state standards has been historically lower than that of non-disabled students. Federal ESEA law also mandates that schools, districts, and states report participation rates and test scores separately for certain subgroups, including five ethnic groups, English language learners, low-income and disabled children. This strategy to report test

scores, in itself, cannot directly improve learning for these students (Elliott, Braden, & White, 2001). The debate among school staff about whether state test scores are overemphasized, underutilized, or even meaningful for students with disabilities may prove difficult for administrators to address.

Challenges for implementing school reform and accountability reform can also come from the public. While there is strong support for higher academic standards and achievement, the majority of the public believes that efforts should focus on reforming the existing public school system rather than finding an alternative schooling system (Rose & Gallup, 2004). The poll also revealed that the public thinks that the No Child Left Behind Act will help improve learning in their local schools. In the same survey, the majority of respondents felt that students enrolled in special education should not be held to the same standards and that their test scores should not be included when determining whether a school is in need of improvement. The majority of survey respondents also felt that schools should not be designated in need of improvement if the performance of special education students is the only group that fails to make state goals. Based on this information, educational leaders may be torn between choosing actions that support inclusive learning and those which promote different standards for students served in special education programs.

Educational leaders have been taking action in response to assessment and accountability requirements of the No Child Left Behind Act (2002). In many school districts, school district administrators are implementing leadership actions which have had a positive effect and student learning has improved. In other cases, leaders have taken

similar actions with little or no student improvement in the school district. The dilemma for leaders is to determine *which* set of actions may be chosen that will lead to the transformation of a school system to a learning organization that improves student achievement for all. The following section provides a summary of the literature regarding leadership challenges and hopes for alternate assessment in improving learning for students with significant disabilities.

Leadership Issues Regarding the Assessment of Students with Significant Disabilities

Various avenues of research in special education shed light on the challenges and issues that confront state and local leaders when considering the assessment of students with significant disabilities. These issues reside within a larger context of concern about testing, reform, and the inclusion of students with disabilities in mainstream education.

Elliott, Braden, and White (2001) suggest that tests do not create educational achievement — good teachers and schools do. While there are instances of schools and teachers who can demonstrate high rates of learning for students in these subgroups, there are too few examples of high achievement for students with disabilities, even though nearly sixty percent of these disabled students have no known cognitive or mild cognitive impairments. Several challenges in testing students with disabilities have arisen during the implementation of state assessment requirements. First, some students with disabilities have been excluded from state assessments. Educators use reasons, such as the test is too hard or students need accommodations that are not allowed (Elliott, Ysseldyke, Thurlow, & Erickson, 1998). Most state assessments utilize paper and pencil

tests and some students with disabilities are physically or cognitively unable take the assessments. Second, it has been difficult to find the participation rates or performance results for students with disabilities (Thurlow, Nelson, Teelucksingh, & Ysseldyke, 2000). A recent article in the New York Times provided recent examples of school achievement reports that excluded disabled students (Schemo, 2004). Thirdly, for students with significant disabilities, no testing was required for students with severe disabilities until the reauthorization of the Individuals with Disabilities Act Amendments of 1997 (IDEA, 1997) which required that all students be included in state and district assessment programs. Elliott, Ysseldyke, Thurlow, and Erickson (1998) also noted that students with disabilities may be learning a different curriculum than what is tested, with students with most severe disabilities working on a life skills program (Browder, 2001). Finally, states had also been struggling to develop and implement valid alternate assessments representing academic content area tests for students who traditionally learned functional skills. These ongoing issues may present barriers to learning for these students and, more importantly to leaders, these issues may present challenges in implementing educational reform for larger learning systems.

One might ask why it is important to include students with significant disabilities in state assessment and accountability systems. It is essential to have all students included in assessments in order to get an accurate picture of how students are doing in an educational system (Thompson, Quenemoen, Thurlow, & Ysseldyke, 2001). There is also evidence to suggest that when students with significant disabilities are included in assessments, other benefits, such as greater access to the general curriculum and teaching

toward higher expectations, can occur (Thurlow & Ysseldyke, 2002). Therefore, the inquiry for this study focuses on understanding the challenges of implementing alternate assessment, assessing the impacts of the assessment on teacher practice, and informing leadership actions to improve learning for students with significant disabilities.

While a movement toward more inclusive policies has occurred within the last forty years, the discussion of inclusion has been renewed with the advent of school reform initiatives to improve learning for all students (Linn, 2000; Thurlow et al., 1998; Tindal, 2002). Within a large body of literature on this topic, there reside a significant number of conceptual papers and research studies dedicated to issues surrounding teaching and assessing students with disabilities in a standards-based environment.

Although less has been studied about inclusion of students with significant disabilities in standards-based systems and assessments, the literature in the following five areas may address the challenge of teaching and assessing students who are generally the least able to learn the general standards-based curriculum and who are generally unable to demonstrate learning on a paper-and-pencil test. This literature review includes critical concepts and research in the areas of 1) including students with disabilities in state assessments; 2) developing and implementing high quality alternate assessments to raise teacher expectations; 3) providing access to the general curriculum for students with significant disabilities; 4) aligning curriculum, instruction, and assessment to academic content; and 5) using alternate assessment data to improve instructional practices, and ultimately student learning.

Inclusion of Students with Disabilities in State Assessments

There is a larger purpose than simply including students with disabilities in state assessments. When discussing participation of students in state assessments, we are really talking about students with disabilities being part of the larger school reform efforts (Thurlow & Ysseldyke, 2002). The standards-based reform movement is based on improving student learning for all students toward a common set of standards and eliminating achievement gaps for disadvantaged students.

In the early 1990's, many students with disabilities appeared to be excluded from state tests. A study conducted by Allington and McGill-Franzen (1992) looked at test exclusion and how it occurred in New York. They found that high performing schools with over 90 percent of students meeting standard were strategically retaining certain students or referring them to special education (where they were excluded from testing). A review of state assessment reports published by 1988 by the National Center on Educational Outcomes (Thurlow, Nelson, Teelucksingh, & Ysseldyke, 2000) showed that only 50-80 percent of students with disabilities were reported to be taking in statewide assessments. A later state survey conducted by the National Center on Educational Outcomes (Thompson & Thurlow, 2003) indicated while assessment participation and reporting for students with disabilities had improved, sixteen states counted students as participating even though they received no score. Thompson and Thurlow (2003) also stated that although alternate assessments were being implemented in all 50 states, only half the states had set achievement standards on alternate assessments. This means that students may be participating in alternate assessments, but their performance could not be

included in accountability calculations in these states. These studies and others demonstrate that many schools and states were leaving out those students because they were unable to appropriately track participation of some students or were unable to include students who participated in alternate assessments in assessment reports of student performance.

Those left out from "high-stakes" tests tend to be excluded when teachers consider instructing the content and skills covered on the tests (Thurlow & Ysseldyke, 2002). Students in special education programs, who need specially designed instruction in order to access academic content, may not be taught important skills and content if they are excluded from testing. Special educators may also be focused on teaching knowledge and skills so that students can meet IEP goals while believing that their students are receiving instruction in general education classrooms. Almond, Lehr, Thurlow, and Quenemoen (2002) state, "Students are more likely to be excluded if they have not been exposed to the curriculum or content being assessed, or if teachers, parents and/or students think the tests are irrelevant" (p. 361). Thus, the equity issue of including students with disabilities in assessments is broader than simply being able to take a state test. It may impact their right to have access to other educational benefits, such as receiving instruction in the curriculum taught to non-disabled students (Thurlow & Ysseldyke, 2002).

The problem of exclusion from state assessments and other educational benefits became even more pronounced for students with significant disabilities in the latest round of standards-based reform. While students with less severe disabilities were expected to

learn some basic reading, writing, and mathematics, students with more significant disabilities were taught mainly life skills not generally found in the curriculum taught to non-disabled students (Browder, 2001; Ysseldyke & Olsen, 1999). Thompson, Quenemoen, Thurlow, and Ysseldyke (2001) noted that low expectations were the most frequent reason for not including students with most significant disabilities in assessment systems. Since state tests typically cover academic areas, such as reading, writing, mathematics and science and students with significant disabilities were not taught the standards-based content included in state tests, there were no efforts to include these students in state assessment systems.

Additionally, students with significant disabilities generally exhibited difficulty in expressing or demonstrating what they had learned. Some students with significant disabilities may not even have a symbolic system of communication (Browder, 2001). Standard ways of testing students, even with accommodations, would not work for students with multiple physical issues and inability to communicate complex ideas or for students with cognitive disabilities who were unable to understand assessment procedures. Therefore, the formats of the assessments were such that these students were not expected to be included in state assessments.

Because students with significant disabilities may have had a different curriculum, low teacher expectations for academic learning, and were not uniformly included in general assessments, state and district leaders often did not consider these students in policy decisions or include them in accountability plans to improve student learning (Quenemoen, Rigney, & Thurlow, 2002).

However, there are many potential reasons for inclusion that educational leaders should consider. Students with disabilities may receive several benefits by being included in state assessment and standards-based reforms (Browder, Spooner, Algozzine, Ahlgrem-Delzell, Flowers, & Karvonen, 2003; Thurlow & Ysseldyke, 2002). Some of these benefits include holding higher expectations and focusing teaching and learning on a common set of state standards. According to Thurlow and Ysseldyke (2002), educators and others can also benefit from inclusive assessment policies, including gaining a more accurate picture of how the educational systems are benefiting all students, providing more equitable comparisons, and considering all students in policy decisions.

Similar goals for improving student learning for students with significant disabilities were anticipated with the implementation of alternate assessments (Browder et al., 2003). The first goal was to foster greater inclusion of students in school and state policy decisions. If all students were assessed, then policy makers would know if students were meeting expectations for learning, including students with the most significant disabilities. Alternate assessments had the potential to provide information that would lead to instructional and resource decisions that could improve performance results for students with disabilities (Ysseldyke & Olsen, 1999).

The second promise for alternate assessments was that overall expectations for students with disabilities would increase (Browder et al., 2003). If students with the most severe disabilities were included in measures of student performance, then teachers would expect them to learn. High stakes accountability systems also require increasing test scores to prove that schools and districts are improving student learning. Thus,

alternate assessment scores would need to increase over time and, correspondingly, students with significant disabilities would need to learn more each year. The overall pressure toward higher expectations and improved performance will apply to students taking alternate assessments (Thurlow & Ysseldyke, 2002). School district leaders could use this push toward higher performance to raise expectations for teachers of students participating in alternate assessments.

The third goal for alternate assessments was to provide access to the same standards-based curriculum and to be assessed against the same state content standards (Browder et al., 2003). Thompson, Quenemoen, Thurlow, and Ysseldyke (2001) stressed that "Alternate assessments are an alternate way of assessing progress toward the *same* standards as all other students are working toward" (p. 18). Although there is general agreement on desired outcomes for students with significant disabilities (Browder, 2001; Kleinert & Kearns, 1999), the specific student outcomes tested on alternate assessments and the link of alternate assessments to state content standards have varied widely among states, according to Quenemoen, Rigney, and Thurlow (2002). Therefore, alternate assessments may promote some degree of access to state standards, but greater professional development may be needed for teachers to align assessment to curriculum and instruction.

The fourth promise of alternate assessment, according to Browder and colleagues (2003), was to improve the quality of instructional programs in the classroom. Alternate assessments were meant to improve the quality of instruction by providing clear targets linked to state standards, by finding ways to measure student engagement in and progress

toward the meeting those state standards, and by using rubrics to define how much progress was made. Thurlow and Ysseldyke (2002) note that teachers should use alternate assessment results not only to measure learning, but also to further extend learning and guide instructional programming decisions.

The goals for alternate assessment summarized by Browder and colleagues (2003) above are designed to meet the challenge of improving learning for students with significant disabilities. Ysseldyke and Olsen (1999) state, "The bottom line in alternate assessments, indeed for all assessment and accountability systems, is improved results for students" (p. 184). There are now several data-based studies on alternate assessment which will provide a foundation for the extent to which alternate assessment practices are moving toward the goal of improved learning (Browder et al., 2003). These studies provide some information about how alternate assessments are being implemented and are generally descriptive in nature rather than evaluative (Browder et al., 2003). The questions remain about what alternate assessment practices are being carried out in schools and school districts and how educators are using these assessments to create higher expectations, increase access to the general curriculum, align curriculum to academic content, and improve instruction for students with significant disabilities.

These studies and related research on alternate assessment guided the literature review in the following four sections. Alongside the findings from research in each section, I will recount the related experiences of Washington state leaders and educators as they developed and implemented the alternate assessment for students with significant disabilities. The first section will summarize the use of high quality alternate assessments

to raise teacher expectations.

Use of High-Quality Alternate Assessments to Raise Teacher Expectations

Teachers and school leaders understand that school reform is designed to promote student learning toward meeting high standards and that assessments to measure that progress are part of the reform efforts. Many of these standards for high quality assessments have been included in federal regulations pertaining to state assessment systems (U.S. Department of Education, 2004). The regulations require that state assessments must be aligned with state academic content and achievement standards and must include multiple measures that assess challenging content and higher-order thinking skills, for example. The No Child Left Behind Act of 2001 also requires that state assessments be reliable and valid for the purpose of determining when schools and districts within the state are making adequate yearly progress toward the accountability goal for all students to meet reading and mathematics standards in 2014. The challenge for alternate assessment is to implement high quality assessments that will yield valid results and raise teacher expectations for learning so that students with significant disabilities can meet alternate achievement standards. Foundational information about concepts of validity and reliability for large-scale assessments is provided first. The application of these two concepts of high quality to alternate assessment will be discussed next, followed by steps taken in Washington State to ensure the quality of its alternate assessment. Finally, the research on raising teacher expectations and using assessment information to raise expectations is summarized.

Concepts of validity and reliability. Professional assessment organizations publish standards and methods for determining the quality of assessments (AERA, 1999). Validity refers to the extent to which the assessment measures the desired performance so that appropriate inferences can be drawn from the results. This means that for each intended purpose of the assessment program, principles of validity must be applied during test development and validity evidence should be checked throughout the implementation of the assessments.

Validity can be measured by collecting evidence of different types from different sources. The Standards for Educational and Psychological Testing (AERA, 1999) apply a similar definition that regards validity as a unitary concept and discuss types of validity evidence rather than distinct types of validity. Messick (1996) defines validity as an overall evaluation of the degree to which empirical evidence and theoretical arguments support the adequacy and appropriateness of interpretations and actions based on test scores or results. The central theme in these definitions is that evidence for validity can be demonstrated in many ways, and that in addition to scientific test statistics, other evidence (such as survey perception data, interviews, observations, and professional judgments) may contribute significantly to the determination of a test's validity.

The second measure of assessment quality is reliability. Reliability is the measure of consistency for an assessment instrument, and the test should yield similar results over time with similar populations in similar circumstances. No test taker will score exactly the same on two tests, even if assessment is administered under standardized conditions each time. There may also be subjectivity in the scorer judgments on open-ended test

items. Because of these two sources of variation in scores, internal (student) and external (scorer), one person's score or average group scores may reflect some measurement error (AERA, 1999). Thus, evidence of both inter-rater consistency and test taker consistency, as well as the standard error of measurement for the assessment, should be provided to determine the reliability level of an assessment system. Reliability evidence, when combined with validity information, helps to form the basis for determining the relative quality of any assessment. The research on these two indicators of quality for alternate assessments is summarized in the following section.

Validity and reliability of alternate assessments. The same principles of validity and reliability also apply to the development and use of alternate assessments. Although the technical definitions of validity and reliability may be abstract to most people (Elliott, Braden, & White, 2001), the quality of tests are of concern to students, parents and educators. The base for research on alternate assessments extends well before the first implementation of portfolios in Kentucky in the early 1990's. Elliott, Braden, and White (2001) state, "the conceptual and measurement foundations for alternate assessment are well developed and are based on years of research in education and psychology covering performance assessment, behavioral assessment, developmental assessment, structured observations, and clinical assessment" (p. 89). Many of these assessment methods have been used to determine eligibility for special education services, to diagnose specific educational needs for IEP goals, to plan for instruction, and to monitor progress for students with disabilities since IDEA was first authorized in 1975. High quality alternate assessments would need similar levels of validity and reliability data in order to show

learning had occurred in academic content for students with significant disabilities.

When tests are used to make important educational decisions, they must meet rigorous standards for producing accurate information (Elliott, Braden, & White, 2001). When IDEA was amended in 1997, only Kentucky had implemented an alternate assessment statewide (Browder et al., 2003). Although Ysseldyke and Olsen (1999) offered a framework for building alternate assessments, the disconnect between what was taught and what was to be tested created huge challenges for states. The first research on alternate assessment in Kentucky also seemed to appear at that time (Kleinert, Kearns, & Kennedy, 1997). Survey research was conducted on teacher views of alternate assessment procedures and policy articles were written about the purpose of alternate assessments as a pathway for including students with significant disabilities in school reform efforts (Thurlow, Olsen, Elliott, Ysseldyke, Erickson, & Ahearn, 1996), but no mention was made of whether or how teachers were changing expectations of what was important to teach in functional or academic content areas.

IDEA regulatory guidance required that alternate assessments yield results in reading, mathematics, and any other content areas included on the general assessment for nondisabled students. Although inclusion of students with significant disabilities might have seemed equitable, special education teachers around the country questioned the connection between the life-skills or functional curriculum that students were receiving and academic content areas represented on alternate assessments (Quenemoen, Massanari, Thompson, & Thurlow, 2000). This, in turn, may have impacted teachers' perceptions of the alternate assessment process and the potential benefits of greater

access to the general academic curriculum and improved student learning in early survey research. In Kentucky, for example, many teachers recognized that the portfolio provided benefits in terms of enhanced student outcomes and improvements in their planning for instruction (Kleinert, Kennedy, & Kearns, 1999). The teachers in Kentucky also felt that the portfolio was more of an evaluation of the teacher's skill rather than the student, and they were concerned about scorer reliability.

The hope that alternate assessments will influence school policy to include all students in educational planning will continue to be challenging until more appropriate methods are developed to demonstrate the technical quality of alternate assessments and scoring of these assessments (Kleinert, Kearns, & Kennedy, 1997). Technical reports summarizing evidence of high reliability and validity for a standardized assessment help policy makers to trust and use assessment results for instructional planning. States, overall, have not published technical reports for their alternate assessments. Other than perception surveys, the literature is very limited in describing how to collect evidence of validity and reliability for alternate assessments (Browder et al., 2003). There has also been little written about how stakeholders interpret and use alternate assessment results for improving instruction. Understanding alternate assessment results are pivotal to demonstrating student learning to teachers and parents (Elliott & Thurlow, 2001); yet technical reports to help stakeholders understand alternate assessment results are rarely found (Browder et al., 2003).

Creating a high-quality alternate assessment in Washington State. All of the policy reports, research, and assessment data from other states were considered when

developing the alternate assessment for Washington State. The Superintendent of Public Instruction selected a portfolio as the alternate assessment method for students in special education programs with significant disabilities. The portfolio test specifications included measuring the student's participation and progress on IEP skills that allow the student to access the general curriculum (Office of Superintendent of Public Instruction, 2000). Teachers were also required to include documentation of the student's ability to generalize and use these IEP skills with others in a multiple settings, with varying levels of support and input.

Specific procedures were developed to standardize the administration of the WAAS portfolio in order to produce reliable scores. Special education teachers and staff members were trained in fall 2001 state-developed workshops to assist the student in collecting and assembling the portfolio evidence of their progress toward meeting IEP goals. Teachers were told that entries in the portfolio could be gathered over the entire school year and both direct and indirect evidence of student performance could be included. Teachers were trained in order to learn how to link the students' individual instructional plans contained in IEPs to standards-based instructional and assessment activities. Teachers at the workshops received samples of portfolio evidence to show growth on IEP goals. They also received training to understand what components were required and to learn how to standardize the entries in the portfolio.

The Office of Superintendent of Public Instruction (OSPI) began to accumulate validity and reliability evidence with the pilot in the spring of 2000. Teachers involved in the pilot were asked to attend a two-day session to provide feedback on the

implementation of the portfolio. They also participated in an informal cognitive lab to discuss how they might judge these portfolios. Washington assessment staff developed a portfolio scoring plan for the summer of 2001 similar to the one used for scoring the general WASL writing assessments. During the scoring of the first operational alternate assessment portfolio, inter-rater reliability data was collected and reported in the 2001 WAAS technical report (Office of Superintendent of Public Instruction, 2001).

Perception data was also collected by OSPI at the Portfolio Scoring Institute in 2001 to address reliability. The survey used in Kentucky (Kampfer et al., 2001) was adapted and given to 13 teacher scorers at the scoring institute. Studies of completed portfolios were also conducted to check for completeness, accuracy of evidence, and alignment of the evidence to the academic content areas for validity purposes. This data collected in 2001 was considered to be baseline and was used to revise portfolio administration manuals and training materials. Finally, a research study was conducted on a sample of 30 portfolios from 2001 (Johnson & Arnold, 2004).

Expanded perception surveys given to a variety of stakeholders and further portfolio analyses have been conducted by OSPI over the past four years and summarized in WAAS technical reports (published at http://www.k12.wa.us/assessment/altassess.aspx). In addition to informing test administration and scoring procedures, these analyses also provide information about improved validity and reliability of the alternate assessment. Some examples of improved validity are closer alignment of portfolio evidence to academic content, fewer examples of portfolios with extraneous evidence, and better indicators of student growth over time.

Inter-rater reliability statistics at scoring have increased and student performances in the evidence seem more consistent. Surveys have also shown shifting attitudes about alternate assessment over the years and more recently a greater number of stakeholders noted they use WAAS portfolio results to inform instructional decisions.

Due to the well-documented power of assessment to influence what children learn and what teachers teach, it becomes critical to find and develop approaches to assessment that reflect the full range of skills, knowledge, and interests that educators want to nurture (Moss, 1992). Developing high quality assessments and improving on validity and reliability of the assessment is the first step toward improving student learning. The No Child Left Behind Act is also counting on the use of assessments and assessment results to raise teacher expectations for all students. The literature surrounding setting higher educational goals and the expanded role of assessments as a tool for raising teacher expectations is provided in the following section.

Raising teacher expectations. Academic standards and assessments and the associated accountability plan, when well-developed and implemented, can change teaching practices and student learning (Gandal & Vranek, 2001; Linn, 2000; Mehrens, 2002). The Standards for Educational and Psychological Testing manual (AERA, 1999, p. 142) states:

> Large-scale testing is increasingly viewed as a tool of educational policy. From this perspective, tests used for program evaluations, such as some state tests that are aligned to the standards, are not used solely as measures of school outcomes. They are also viewed as a means to influence curriculum and instruction, to hold teachers and school administrators accountable, to increase student motivation, and to communicate performance expectations to students, to teachers, and to the public.

This new perspective of using assessments as a means to communicate higher expectations for student learning must be viewed in light of the educational research on this topic. The literature related to teacher expectations is large (McGrew & Evans, 2004). A brief summary of the pivotal research on teacher expectancy follows.

The field of educational psychology has documented expectation effects in many research studies (Cotton, 2001; Elliott & Thurlow, 2001; McGrew & Evans, 2004). The Pygmalion effect or self-fulfilling prophesy was demonstrated in the Rosenthal and Jacobson study in the 1960's. Cotton (2001) reviewed the study which involved providing false information about the learning potential of certain students to teachers in an elementary school in San Francisco. The study found that these students' IQ test results following the research period were far superior to the scores of students with similar abilities in other classrooms. Cotton (2001) summarizes, "the Rosenthal/Jacobson study concluded that students' intellectual development is largely a response to what teachers expect and how these expectations are communicated" (p.2). Current educational research syntheses and meta-analyses have concluded that the expectations of one person can influence the behavior or performance of another (McGrew & Evans, 2004; Ysseldyke, 2001). The effects of expectations on student performance are among the most surprising and significant with respect to learning outcomes (Elliott & Thurlow, 2001).

Cotton (2001) summarized research on some of the factors which may lead teachers to hold lower expectation. Factors, such as student lack of experience, generalizing from one student characteristic to overall ability, and focusing on learner

limitations, have been identified as potential sources of low expectations (Cotton, 2001). Low expectations for diverse learner groups (for example, students of different ethnic groups, students with disabilities) are a type of group stereotype bias (McGrew & Evans, 2004; Steele & Aronson, 1998). These factors can apply to teachers of students with disabilities, too. Teachers who had not even considered academic instruction for some students with disabilities may also be unclear about what academic expectations are even possible. Expectancy effects during school reform efforts for students with cognitive disabilities can be pronounced (McGrew & Evans, 2004). This standards-based stereotyping when teachers believe that students cannot reach high standards can have direct and indirect negative influences on academic performance. Although the review of the research on achievement patterns of students with cognitive disabilities demonstrates the wide range of performance scores, educators may hold low academic expectations for individual students based on I.Q. scores (McGrew & Evans, 2004). They go on to state, "The silent, subjective shifting (toward lower) evidentiary academic standards (for students with disabilities) represents a subtle, yet potentially potent force" against high achievement (McGrew & Evans, 2004, p. 28).

Many special education stakeholders believe that promoting the same high expectations and accountability for student achievement will lead to improved learning for all (Elliot & Thurlow, 2001; McGrew & Evans, 2004). This is also true of alternate assessments (Browder, 2001). Elliott and Thurlow (2001) state, "Instruction toward meeting standard is just as important for students in the alternate assessment as it is for all other students" (p. 64). Thus, leader and teacher expectations about using the alternate

assessment to set high performance goals for students with significant disabilities are critical to the success of the alternate assessment as a catalyst to improve instruction and as an accountability measure.

Using assessments to raise expectations across the nation and in Washington. Several strategies in setting high expectations for students have been developed (Black & Wiliam; 1998; Cotton, 2001; Tomlinson, 2003). One of the strategies shared by Tomlinson (2003), Cotton (2001) and Black and Wiliam (1998) is focused on increasing teacher understanding and use of assessments, both summative and formative. A second common recommendation among these authors is using reliable assessment data to inform instruction. A third strategy is monitoring student progress closely. Black, Harrison, Lee, Marshall, and Wiliam (2004) add that improving formative assessment raises standards and providing frequent feedback to students can guide improvements in learning. Linn (2000) suggests seven assessment recommendations he considers to be ways to enhance the positive impact of assessment. Four of Linn's strategies are applicable to teachers and school district administrators: provide safeguards from selective assessment exclusion; seek multiple indicators of achievement (not just one test); place more emphasis on comparisons over time; and use both progress toward and status compared to standards as measures of accountability. Strategies for raising expectations for teachers of students with disabilities taking general and alternate assessments, with or without accommodations, will parallel those previously mentioned.

The literature for assessment recommendations to increase expectations solely for students with significant disabilities is more limited. Educators need information on how

to research-based procedures like understanding key measurement, assessment, and inclusion principles for students with disabilities (Elliott, Braden, & White, 2001). Quenemoen, Thompson, and Thurlow (2003) recommend that teachers and administrators have a clear understanding of alternate assessment vocabulary, scoring rubrics and performance descriptors and criteria. Additionally, Quenemoen and colleagues (2003) suggest that teachers examine alternate assessment scores to look for areas of strength, as well as monitor performance results over time to look for program improvements.

Browder (2001) lists several ways to use alternate assessment information that focuses on capacity-building: include all students in assessments and school enhancement goals; use current, reliable alternate assessment performance indicators to plan students' instruction and develop curriculum guides; avoid outmoded or stigmatizing labels when reporting results; use performance terms to describe strengths and achievements; and link assessment to both functional and adapted general education curricula. Elliott and Thurlow (2001) report many of the same strategies and include the following additional ones: using alternate assessment domains to amend IEPs as necessary to address these domains, watching for improvement of all students toward meeting alternate achievement standards over years, and utilizing performance results in each domain to inform instruction and to determine new skills for the student.

In Washington, many of these strategies have been employed to help special education teachers in raising expectations for students with significant disabilities. State OSPI officials were aware that professional development for teachers implementing the

WAAS portfolio would be essential in order to implement technically adequate procedures for the portfolio and assessment contracts included provisions for statewide training. Training schedules, agendas, and workshop handouts were posted on the OSPI alternate assessment webpage (http://www.k12.wa.us/SpecialEd/assessment.aspx). Regional fall workshops were designed and carried out each year to help teachers to follow proper procedures for collecting evidence of student performances as well as showing teachers how to link classroom activities to state standards and the IEP. Finally, the training module included samples of standards-based portfolio evidence which were designed to foster the belief that students with significant disabilities could, in fact, engage in academic tasks. After alternate achievement standards were set in January 2003 (Arnold, 2003), example portfolios were distributed at the fall workshops which included annotations of standards-based evidence and rationale for score points awarded. A guidebook for interpreting the WAAS portfolio scores and levels of performance was also created and distributed in 2003.

Browder (2001) cautions that ". . . in the absence of an established curriculum for students with severe disabilities, assessment has often been a futile process, producing little of value for developing the IEP" (p.9). States, however, were not consistent in designing alternate assessments with academic content in mind (Quenemoen et al., 2000). Nine states reported they had based alternate assessments on functional skills with no alignment to state standards in 2000. Since alternate assessments were mandated to include scores in academic content areas of reading, mathematics and science, then literature in regards to academic curriculum and instruction for students with significant

disabilities will be important to review.

Providing Access to the General Curriculum for Students with Significant Disabilities

Nolet and McLaughlin (2000) point out that access to the general curriculum for students with disabilities was a new topic for special educators. Students with significant disabilities were taught a functional life-skills curriculum and were excluded from state achievement tests. Additionally, their teachers were excluded from professional development opportunities or meetings about new state standards (Thurlow et al., 1998). With the advent of alternate assessments measuring student skills in the context of academic content, many teachers still felt that alternate assessments were an extra state requirement and not related to the student's program (Quenemoen et al., 2000). These issues of separation of alternate assessments from what was taught and lack of knowledge about state standards may have created some curricular confusion for teachers. Jackson, Harper, and Jackson (2001) have reviewed the literature on barriers to effective teacher practices in accessing the general curriculum. In addition to the barriers previously mentioned, Jackson and colleagues (2001) note that the responsibility to meet the needs of individual students has increased teacher workloads, shifting teacher roles and expectations, and lack of time, skills and training. Many states attempted to gauge teacher attitudes about the level of student access to the general curriculum during the early days of implementing alternate assessments.

Examining access to the curriculum in Washington. Washington State education department staff conducted an initial survey in 2001 to establish baseline information

about access to the general curriculum for students with significant disabilities (Office of Superintendent of Public Instruction, 2001). None of the Washington teachers thought they had embedded the portfolio elements into instruction and portfolio scores centered on the lowest possible total score (5 out of 20 possible points). None of the survey findings were surprising considering that 2000-2001 was the first operational year for the alternate assessment, and teachers generally had not considered providing access to the general curriculum (standards-based activities) for students with significant disabilities. While teacher perception data is valuable, it is not the only evidence that was used to determine the level of access to the general curriculum for students participating in alternate assessment portfolio in Washington.

Based on the survey results, the State of Washington commissioned a study to analyze the components and evidence of 23 portfolios submitted during 2001. Johnson and Arnold (2004) found that teachers had a difficult time in linking IEP tasks to the academic content standards. Teachers included classroom data and student work for skills other than the targeted skill in the portfolio entries. The portfolios also did not display evidence of progress over time on IEP skills. These findings did lead the state to clarify test specifications in portfolio training modules and to develop a teacher checklist for portfolio completeness (http://www.k12.wa.us/SpecialEd/assessment.aspx). Each of these state actions had implications for how to determine and established baseline levels of validity and reliability of the alternate assessment, as well as provided information about the level of access afforded to students participating in the WAAS portfolio.

While these inquiries may have helped to establish a baseline about the level of

access to the general curriculum for the alternate assessment in Washington, no challenge was greater than trying to provide appropriate examples of students accessing standards-based curriculum and instruction (Johnson & Arnold, 2004). After reviewing all portfolios submitted to the state in 2001 and 2002, very few examples of reading, writing and mathematics activities could be found in the evidence. The gap between the accepted curriculum standards for students with significant disabilities and school reform goals appeared to be a major stumbling block to acceptance of the WAAS portfolio as a valid assessment for these students. In the fall of 2003 a group of special educators met with state assessment officials to form the first special education assessment leadership team (SEALT). This team was charged with creating professional development materials to assist teachers in creating understanding of assessment literacy concepts and accessing the standards-based curriculum for students with disabilities.

The challenge of defining appropriate access to the general curriculum. Students with disabilities often have characteristics which may represent barriers for teachers thinking about developing instructional units based on the general curriculum (Kleinert, Browder, & Towles-Reeves, 2005). Student disabilities may limit the way they can perceive information, how they process it, and how they demonstrate what they have learned. Based on a neurological research, the Center for Applied Special Technology (2002) has identified three brain networks that control the path to learning as the foundation to the theory of Universal Design for Learning (UDL). The recognition network, which receives and analyzes information, implies that we may need to vary how information is presented. Strategic networks concentrate on planning and executing

actions which have implications for how we design ways for students to respond. The third network, which is affective, allows a person to evaluate and set priorities. This network suggests that educators pay attention to the ways we engage students in learning. Universal design for learning can be reflected in the methods that information is presented, the expectations and modes that students use to express what they know, as well as the way we engage students in educational activities (CAST, 2002).

Several national organizations, such as CAST and the National Alternate Assessment Center (NAAC), have summarized potential strategies to providing access to the general curriculum for students with cognitive disabilities. Denham (2004) provides an annotated list of presentation tools, reading strategies, and writing response supports that are aligned with UDL principles. Jackson and colleagues (2001) also recommend several potential strategies for overcoming barriers for teachers, such as collaborating with parents and other teachers, using flexible grouping for explicit instruction, implementing a student self-managing environment, and developing peer support systems.

Aligning Curriculum, Instruction, and Assessment for Students with Significant Disabilities

Use of the strategies described above may improve the level of access to the general curriculum, but alternate assessments must now be linked to grade level content standards for all students (Kleinert et al., 2005). Aligning assessments with state standards and instruction has been a focus of state testing programs (Almond, Lehr, Thurlow, & Quenemoen, 2002; Gandal & Vranek, 2001), and research has yet to be

conducted regarding how assessment decisions are made in light of what is taught. The following section will summarize the literature on alignment of curriculum, instruction, and assessment for students with disabilities.

What alignment entails for students with significant disabilities. IDEA requires that students with disabilities be afforded access to the general curriculum to the maximum extent possible. Students with significant disabilities often have good alignment between curriculum, instruction, and individual assessment for functional life skills. But finding the connection between the life skills IEP goals set out for students with significant disabilities and the general curriculum found in state standards in academic content areas has proved to proved to be confusing to some (Browder et al., 2003). Although general educators have received training in understanding and applying standards within classrooms, special education staff may not have been included in professional development centered on teaching to standards (Thurlow & Ysseldyke, 2002). They may be unfamiliar with academic content standards that must be translated or extended for students with significant disabilities.

Changing conceptions of appropriate curriculum for students with the most significant disabilities has presented another challenge for special education staff. The push toward inclusion has meant a shift in focus away from strictly a life skills or functional curriculum (Browder, 2001). Seventy-two percent of states align alternate assessments in some way with academic content standards, either through grade-level or expanded standards, according to Thompson and Thurlow (2003). Additionally, eight percent of the states linked alternate assessments to a combination of academic standards

and functional skills. Several curriculum models have emerged to reconcile these two areas of curriculum that are relevant to life skill needs and to the public school curriculum (Browder, 2001). These models may link to some academic readiness areas, such as letters of the alphabet or counting but rarely do they address cognitively demanding knowledge or skills (Browder, 2001). Despite the pressures to include standards-based curriculum, special education teachers in Washington still have difficulty in making the links from academic content standards to their IEPs (Johnson & Arnold, 2004).

Planning for alternate assessments may be difficult due to this lack of curriculum clarity. Students with significant disabilities within a school district do not have a common curriculum, comparable to a typical school district course of study (Browder, 2001). School districts that have adopted a standard life skills curriculum do not take into account that many students with significant disabilities may be accessing the general curriculum of their nondisabled peers through inclusive classrooms and other settings. In addition to the problems associated with narrowly-focused or missing curriculum, the complex issues of aligning curriculum, instruction, and assessment for students with significant disabilities should be considered.

Effective schools research has found that schools that carefully align curriculum and instruction with state standards and assessment enhance the performance of individual students (Office of Superintendent of Public Instruction, 2003). One way to align curriculum, instruction and assessment is for states to clearly define state standards so that all stakeholders and students understand what students should know and be able to

do by the end of their education. When states carefully plan the standards-based curriculum that will be taught, then teachers can select instruction to promote the intended goal for students (Elliott, Braden, & White, 2001).

Another way to align curriculum, instruction and assessment is to start with the assessment (Elliott, Braden, & White, 2001). Educators can start by assessing student performances in order to clarify the outcomes that are expected for students. Using the assessment as a starting point, educators then can align curriculum and instruction to support the intended student outcomes. In a cyclical manner, assessment can be used to both clarify student learning goals and to provide results to stimulate school accountability for better curriculum and instructional alignment. This alignment method has proven to be effective with students with significant disabilities through alternate assessments.

Educators had little information of how students with significant disabilities could be included in standards-based assessments, let alone a vision of what or how to teach academic content areas. Kentucky researchers found that alternate assessment scores improved over time (Kleinert & Kearns, 1999). They also found that educators began to incorporate academic domains in their portfolio evidence, rather than reporting student performance on functional life skill domains. Educators in Kentucky also revised their alternate assessments when state experts suggested the need to incorporate higher expectations in academic portfolio entries. Setting higher expectations for students with significant disabilities does not necessarily mean that instruction will automatically improve. States began to build more modules on instructional alignment to standards into

assessment training sessions.

Steps toward alignment of curriculum, instruction, and alternate assessment in Washington. The planning for alternate assessment in Washington State included elements to address the intent of the portfolio assessment, the expected student outcomes, curriculum based on state standards and a process to link specially designed instruction in the IEP, assessment targets, and the general curriculum. While teachers are still being trained to collect data and assemble the portfolio based on the students' individual learning plans, the emphasis for professional development in now placed on the relationship between curriculum, instruction, and assessment in the context of school improvement. Training materials (published and posted on http://www.k12.wa.us/SpecialEd/assessment.aspx) also provide information on assessment literacy concepts, providing access to the general curriculum standards, and writing measurable IEP goals. Anecdotal reports from teachers at OSPI workshops suggest that administering the portfolio assessment has caused them to rethink the type of IEP goals they select, the types of instructional activities they carry out, and the methods for collecting classroom data on students' skills. Other teachers still complain that the portfolio is simply a state-mandated set of paperwork with no relevance to their instructional practice or to their students' learning goals or expected outcomes.

Mid-South Regional Resource Center recently issued a report from individual teachers and states documenting the positive impacts of implementing alternate assessments (Moore-Lamminen & Olsen, 2005). Other than this recently published account of alternate assessment effects, the scope and type of changes to curriculum,

instruction, or student outcomes is not really known. The role of alternate assessment in Washington in shaping any possible changes in access to the general curriculum, instructional practices, or student learning is also unknown beyond the changes in portfolio evidence documented from annual OSPI studies summarized in the WAAS Technical Reports (http://www.k12.wa.us/assessment/altassess.aspx). Beginning work on alignment of alternate assessments to state standards was accomplished in a short period of time and produced limited documentation (Almond et al., 2002). The next section will address how assessment results situated in an era of school accountability may influence improvements in instructional practices and increased student learning.

Using Alternate Assessment Data to Improve Instructional Practices and Student Learning

Provided teachers have awareness of general education academic standards and high expectation goals, student access to the general curriculum, and some degree of alignment between curriculum, instruction, and assessment, the conditions are set for alternate assessment data to influence both teaching and learning. The ESEA rules dictate that accountability systems must hold schools and school districts accountable for the performance for all students as a group and for subgroups of students, including students in special education. ESEA directs states to set a yearly performance bar based on a percentage of students meeting the state achievement standards with increasing bars until 2014, where the goal is set at one hundred percent of all students meeting standard. Hill (2001) suggests that states develop their accountability formula carefully, considering essential questions to be addressed: What seems reasonable and fair and will encourage

the greatest improvement for every student? Since many testing experts cannot provide conclusive evidence that the inclusion of results from alternate assessment will technically invalidate school scores, and given the assumption that assessment gains for these students are important in improving outcomes for these students, Hill (2001) concludes that the decision about how the state will incorporate results from the alternate assessment into a school accountability formula is primarily a policy decision, not a technical decision. Since politics may dictate the purpose and uses of alternate assessments for accountability purposes, then determining how the alternate assessments influence student learning should inform policy decisions as well as inform instructional practice.

Assessments as a potential influence on teaching. Gandal and Vranek (2001) state, "When well-developed and implemented, academic standards and assessments have the potential to change the nature of instruction and student learning" (p. 9). Little has been written on the process individual teachers may use for implementing the alternate assessment portfolio at the classroom level. Research is lacking in understanding how, if at all, these students are participating in large-scale assessments in academic content areas and how teachers facilitate that participation. Students with significant disabilities are typically measured on progress toward meeting individualized goals and objectives, which may or may not be focused on literacy or numeric skills contained in state standards.

Some school reform and improvement planning models are based on data-driven decision-making. Until states set policy on how alternate assessment results would be

reported, little school improvement planning for students with significant disabilities could take place (Thurlow et al., 1998). In 2001, only half of the states reported alternate assessment scores, according to a report by Thompson and Thurlow (2001). Reporting alternate assessment scores with the general assessment scores was seldom practiced, unless alternate assessment results were reported in the lowest proficiency level. Bechard (2001) summarized six models for reporting alternate assessment results based on what states were considering. Researchers in Kentucky found that their method of reporting alternate assessments in the same levels as the general assessment seemed to net several benefits for students including student use of individual schedules, increased use of communication systems, and students' participation in evaluation of their performance (Kleinert, Kennedy, & Kearns, 1999). Most states have now determined how alternate assessment scores will be reported, but use of this performance data is still limited for school improvement planning because educators and parents don't understand the results reported by academic content areas for students who may never read or perform mathematical computations.

Attempts in Washington to make alternate assessment data useful. In Washington State, prior to setting alternate achievement standards in January of 2003, many meetings were held with national assessment experts in order to determine how to conduct standard setting in order to make accurate judgments of performance and to inform teaching for students with significant disabilities. The recommended methodology was used to set the alternate achievement standards for the WAAS portfolio and performance descriptors for each of four performance levels were developed. Following procedures outlined in the

Standards for Educational and Psychological Testing (AERA, 1999), the standard-setting committee set cut scores in three rounds of review, using the scoring rubric, sample portfolios, and impact data from the 2002 administration of the alternate assessment. Participant surveys taken at the end of the standard setting sessions indicate that members were satisfied with the alternate achievement standards that were set (Arnold, 2003).

In an effort to help educators understand the alternate assessment standards for students participating in WAAS, representatives from the state assessment department sponsored a series of regional workshops in the fall of 2004. When asked to provide feedback at these informational meetings, school district leaders and teachers sought clarification on which students should be taking the alternate assessment and what the WAAS assessment was measuring. They asked many questions about the cut scores for each level of performance, and seemed unsure of the purpose of WAAS performance descriptors for students with significant disabilities. All of these factors may have contributed to what seemed to be a limited understanding of portfolio scores for individual students and may have prevented widespread use of alternate assessment results for school district program planning purposes through the end of the 2002-2003 school year.

Despite the problems with understanding which students should take an alternate assessment and what the results meant, participation in the WAAS portfolio doubled from 2003 to 2004 (see http://reportcard.ospi.k12.wa.us/ for WAAS assessment results). There were probably many factors and pressures that contribute to this rapid rise in participation. Starting in August of 2003, the Superintendent of Public Instruction

released the annual assessment results for WAAS at the same news conference as the general WASL results. This leadership action may have lent credibility to the WAAS portfolio as part of the overall state assessment system. These factors and pressures associated with state alternate assessments may also have arisen from the new state accountability system put in place January 2003 (see ESEA accountability workbook at http://www.k12.wa.us/ESEA/ApplicationsReports.aspx). Some special education teachers reported to OSPI staff at regional workshops that school principals were requesting that more students participate in the WAAS portfolio to raise the number of students meeting standards for accountability purposes. Survey data collected at 2003 WAAS regional workshops reinforced the notion that teachers administering WAAS were finding the portfolio process easier and WAAS may have had some positive impacts on educational changes for these teachers. The 2003 survey data also supported the notion that administrators also perceived that changes were occurring following the implementation of the WAAS within their school districts.

Leaders will need to rethink systems and practices in order to meet new accountability goals (Hess, 2003). Assessment literature and research on national and local levels seem to indicate some changes in current leadership practices may be occurring toward improving student learning to meet high standards in the current age of inclusive accountability (Almond et al., 2002; Elliott & Thurlow, 2001; Moore-Lamminen & Olsen, 2005). The literature on recommendations for state and school district leaders in improving assessment policies and practices in the context of accountability, particularly for alternate assessment, will be summarized in the next

section. Strategies for connecting these recommendations to an assessment theory of action for educational leaders will also be discussed.

Connections to an Assessment Theory of Action for State and District Leaders

The research literature cited above help to inform a variety of actions that leaders at both state and local levels may take to make the assessment of students with significant disabilities an integral part of education reform goals. Specifically, the research offers ideas about policies and practices that leader may institute to foster greater attention to the scope and quality of learning opportunities available to these students, and ultimately encourage better post-school outcomes for them. To realize these potential benefits, leaders' work is guided by an "assessment theory of action" that identifies key leverage points, addresses anticipated challenges, and takes advantage of opportunities that arise in assessment arenas within the context of school reform.

Some educational theorists have looked at school reform and accountability as the catalyst to refocus instruction, to build a culture of problem solving, and to start making improvements (Jerald, 2003). The main strategies for school reform efforts, such as ones in the No Child Left Behind Act, may be important but they will not change situations and systems by themselves (Clark & Wasley, 1999; Fullan, 2003). Challenges for educational leaders in applying large-scale assessment policy illuminate the complex nature of leading during times of school reform (Elliott & Thurlow, 2001). In order to grapple with the complexities of school systems, some educational theorists have attempted to provide a framework to make links between leaders' actions, learning

processes, and renewal within a school culture (Knapp, Copland, Ford, Markholt, McLaughlin, Milliken, & Talbert, 2003). Knapp and colleagues (2003) assert that three learning systems (student, professional, system) impact each other and are influenced by a set of social, organizational and policy contexts. School system leaders operating in this type of educational system may take actions that will influence educational renewal at the student, staff, or systems levels, according to Knapp et al. (2003). Change in one situation or system, as a result of actions taken, can act as a catalyst and can create changes in any or all systems and contexts. This conceptual framework may provide a tool for developing a plan for leadership action within the context of current assessment and accountability requirements.

Goodlad (1999) summarized the literature regarding leadership in the context of educational change and found that a growing number of reports regarding renewal in schools dispel the idea that educational change is a result of "charismatic leadership". Effective leaders have a clear idea of what good instruction looks like, but must develop powerful theories of school improvement to meet the needs of educating students (Elmore, 2003). The educational reform literature focuses on several leadership strategies for improving student outcomes which include the following: building a focus on learning, improving relationships, building leadership capacity, creating conditions for professional learning, using data to inform decisions, and leveraging resources creatively (Fullan, 2002; King, 2002; Lambert, 2002). These represent general components of a theory of action that is targeted in the following section more specifically to the constructive use of assessment in improving the education of students with significant

disabilities.

Developing an "Assessment Theory of Action"

An assessment theory of action may include strategies along several different pathways. The literature includes suggested leadership actions in four areas that are likely to improve learning for all students as well as for those with disabilities. The four areas represent a logical sequence of assessment activities. However, leaders are likely to implement steps in more than one area simultaneously, as they try to build systems and a culture of support for the constructive use of alternate assessments.

A first area of leadership action in an assessment theory of action is the explicit attempt to promote full inclusion in assessments (Elliott, Braden, & White, 2001). IDEA 1997 required participation of all students in state and district-wide assessment programs. Associated actions within this area of inclusion are suggested in the literature. For example, Thurlow and colleagues (1998) believe that mission statements for learning and achievement need to be anchored to the assessment of student learning. Almond and colleagues (2002) assert that leaders need professional development to understand the participation of students with disabilities in state assessments. These specific recommendations for action support the theory of full inclusion in assessments.

Once the principle of full inclusion is established, a second leadership action involves developing strong public support for fair test implementation for students with disabilities (Almond et al., 2002; Elliott & Thurlow, 2001; Linn, 2000). Fair testing practices require knowledge of the individual student, instructional level, assessment

options, and accommodations for the classroom and testing (Almond et al., 2002). One leadership strategy found in the literature is monitoring the appropriate implementation of assessments and limiting assessment practices that have been shown to be ineffective (Ysseldyke, 2001). Professional development around the use of instructional accommodations to improve learning toward state standards and selecting those implemented on assessments can also be supported by administrators (Elliott & Thurlow, 2001). These leadership actions may increase fair testing practices.

A third area of leadership action is taking steps to ensure appropriate communication and understanding of assessment results. Elliott, Braden, and White (2001) assert that it does no good to have performance scores for all students if the instructional leader does not understand the meaning of the test results. Leaders must be able to explain how assessments can assist in evaluating whether students are achieving at a sufficiently high level (Mehrens, 2002). Leaders should increase communication about assessments and performance results among key stakeholders (Almond et al., 2002). Leaders should implement strategies to promote professional development in assessment literacy, assessment alignment to standards, and valid interpretation and use of test scores (Linn, 2002). This literature seems to indicate that an assessment theory of action should also include leadership actions to ensure clear understanding and communication of assessment results.

Fourth, the literature surrounding assessment strategies for educational reform also underscores the appropriate *use* of assessment data, and leadership actions can play a central role in improving teaching and learning. There are many tough issues beyond just

improving test scores (Elliott & Thurlow, 2001). Testing will improve the nature of education only if educators use test results effectively (Haladyna, 2002; Sharkey & Murnane, 2003). Analysis of performance on state assessments for students with disabilities is a key strategy for planning instructional and program improvements (Jackson et al., 2001). Educational leaders are concerned with improving instructional practice, refining programs, channeling funding, and identifying the root causes of success when examining large-scale assessment results (Cizek, 2005). Mehrens (2002) states that assessments would be more likely to influence curriculum and instruction if there was more teacher professional development. Leaders can also promote the use of multiple means of assessments, classroom formative and summative assessments, as well as the results of state tests, to evaluate program effectiveness and to shape future instruction (Jackson et al., 2001; Black & Wiliam, 1998). These actions may improve the use of assessment performance to increase student learning.

To summarize, an assessment theory of action highlights actions that leaders may take to build alternate assessments into the current educational reform efforts to improve learning for all students. That result is more likely to occur to the extent that leaders take the following steps: promote full inclusion in assessment programs, implement fair testing practices, clearly communicate assessment results and assist stakeholders understand their meaning, and encourage appropriate use of performance results to inform curriculum and instructional programs. Some specific strategies for implementing this theory of action were also suggested in the literature. While relevant strategies for accomplishing these goals are suggested in the literature, a leader may face challenges as

well as opportunities in applying an assessment theory of action aimed at students participating in alternate assessments.

Challenges and Opportunities in Enacting an Assessment Theory of Action

Adapting such a theory of action to individual educational communities and contexts, and implementing it in those settings, raises a number of difficult challenges for leaders, but also provides an environment for positive changes. Browder (2001) provides a list of complex challenges for planning alternate assessments. First, students with significant disabilities within a district may not have a common curriculum. Secondly, the curriculum contained within these individualized plans may not be comparable to a district's course of study in academics. Finally, Browder (2001) suggests that the individual nature of the curriculum and monitoring progress of student learning may not lend itself well to standardized testing. These challenges may have implications for leaders using assessment strategies to improve student learning. In applying an assessment theory of action aimed at students with significant disabilities, leaders may need to consider specific strategies centered on alternate assessment policies and practices.

In light of these challenges, many practices have been recommended for the development and implementation of alternate assessments since the passage of IDEA amendments in 1997 (Browder, 2001; Kleinert, Kennedy, & Kearns, 1999; Thompson, Quenemoen, Thurlow, & Ysseldyke, 2001; Ysseldyke & Olsen, 1999). Browder (2001) states that leaders should use alternate assessment as a foundation for continuous

enhancement of educational programs. As they do so, educational leaders will find important opportunities for program improvement residing in the enactment of an inclusive standards-based assessment policy.

Using the leadership for learning framework summarized by Knapp, Copland, and Talbert (2003) and an assessment theory of action, state and school district leaders in Washington might find opportunities for improving the quality of teaching and learning for all, in the five areas previously discussed in the chapter:

- Exploring the meaning of "full inclusion" in state assessments.
- Using the implementation of alternate assessments as a vehicle to raise teacher expectations for students with significant disabilities.
- Using the implementation of alternate assessments and interpretation of results to promote greater access to the general curriculum.
- Aligning curriculum, instruction, and alternate assessment to academic content being tested.
- Finding ways to use alternate assessment data to inform and improve teacher instructional practices.

The following discussion explores the opportunities for each of these five critical concepts.

Exploring the meaning of "full inclusion" in state assessments. One major opportunity for leaders is to understand and help others to understand the issues surrounding full participation of students in assessments and the multiple purposes of assessment systems (Almond et al., 2002). Leaders must communicate and collaborate

with others, such as principals, special education directors, and assessment coordinators, to carry out fair assessment policies in four major areas: appropriate IEP team assessment decision-making process, participation of all students in the assessment program, accommodations of diverse learners, and accounting for all test takers, including those who take alternate assessments (Thurlow et al., 1998). Administrators who are familiar with these inclusive practices can promote appropriate decisions about assessment options by using state participation guidelines (Elliott, Braden, & White, 2001; Thurlow & Ysseldyke, 2002). School district leaders can deliver consistent themes of inclusive assessment and accountability in conferences and publications (Thurlow et al., 1998). Reporting the scores for all students, rather than for a subset of students, can help leaders to make better policy decisions (Thurlow & Ysseldyke, 2002). These actions support the notion of full inclusion in an assessment theory of action.

Using the implementation of alternate assessments as a vehicle to raise teacher expectations for students with significant disabilities. A second opportunity to consider is the potential of alternate assessments to raise teacher expectations for what is possible for students with significant disabilities to learn. One of the benefits of standards-based reforms is that instructional programs for students with disabilities will be focused on common educational standards (Thurlow & Ysseldyke, 2002). Leaders can speak to the credibility of alternate assessments by documenting the reliability and validity of alternate assessments in their schools (Almond et al., 2002; Quenemoen et al., 2002). Browder, Karvonen, Davis, Fallin, and Courtade-Little (2005) found that teacher training on instructional components of the alternate assessment both improved scores and gains

occurred on IEP objectives for students with significant disabilities in North Carolina. Browder and colleagues (2005) suggested that if teachers would combine data collection for alternate assessment evidence and for making instructional decisions, then assessment time could potentially enhance instructional effectiveness. Although literature was limited for suggesting leadership action for raising teacher expectations for those working with students with significant disabilities, a first step based on this recent research may be to promote teacher professional development on alternate assessment components and embedded data collection in the classroom.

Using the implementation of alternate assessments and interpretation of results to promote greater access to the general curriculum. The third opportunity for leaders is to use the alternate assessment implementation process and interpretation of alternate assessment performance results as a catalyst to increase access to the general curriculum for students with significant disabilities. Elliott and Thurlow (2001) stated, "Instruction toward meeting standards is just as important for students in the alternate assessment as it is for all other students" (p. 64). Browder (2001) notes that curriculum work needs to keep pace with standards measured in alternate assessments. Strategies can include providing continuing in-service about students with disabilities for general education teachers and encouraging collaboration between special and general education teachers to set clear instructional goals for students with disabilities (Jackson et al., 2001). Elliott, Braden, and White (2001) suggest that educational leaders, as well as teachers, need to know the content that is measured on alternate assessments. The literature is limited in providing specific recommendations for leadership action to promote greater access to

the general curriculum for students with significant disabilities although promotion of teacher professional development in providing instruction in academic content appears to be indicated.

Aligning curriculum, instruction, and alternate assessment to academic content being tested. Fourth, with the arrival of the alternate assessment, leaders have a substantial opportunity to encourage alignment among curriculum, instruction, and alternate assessment to the academic content being tested. Educational leaders can lead their schools in aligning instruction, content, and alternate assessment while avoiding the "teaching to the test" mentality (American Institutes for Research, 2006; Browder, 2001). Administrators who are familiar with these practices can effectively participate in IEP meetings and can facilitate the discussion about inclusive instructional practices that are aligned with state standards (Elliott, Braden, & White, 2001). The first research on alignment with alternate assessments has just begun starting in 2005 (National Alternate Assessment Center, 2006). Leadership actions for alignment of curriculum and instruction for students with significant disabilities to alternate assessment may be more readily found in the literature once this alignment is studied more fully.

Finding ways to use alternate assessment data to inform and improve teacher instructional practices. Finally, alternate assessment data provides an opportunity, which leaders can take advantage of, to inform and improve teacher instructional practices. Elliott and Thurlow (2001) state that leaders need to decide how alternate assessments can be used to impact instruction and improve learning. Browder (2001) suggests using alternate assessment results to develop or improve curriculum for students with

significant cognitive disabilities aligned with standards, using performance indicators when planning students' instruction and supports, and for creating new educational opportunities for students. Leaders may use alternate assessment outcomes for program evaluation and ongoing enhancement of teaching for students with significant disabilities (Browder et al., 2003). Other leadership actions may be determined and reported in the literature following further research is conducted on the impacts of alternate assessment.

Enacting the Assessment Theory of Action in Local and State Reform Contexts

Embedding these kinds of opportunities and strategies for improving learning for students with significant disabilities into an evolving assessment theory of action at state and local levels has yet to be realized (Browder et al., 2003). Various state and local factors and conditions come into play as leaders develop assessment strategies to improve teaching and learning. A few of the most salient factors that leaders may take into account include local capacity and current policy directions, stakeholder interests and preferences, fiscal limitations, staffing configurations, adopted curriculum, and teacher approaches to instructional practices. The sum of these factors will mean that local educational leaders may vary in their specific approaches to implementing an assessment theory of action as they identify the most strategic points of leverage in their local settings. At the state level, the theory of action guiding state department of education officials and agency activities will need to provide for and be respectful of local variations in approach and contexts, as assessment policies are refined over the years.

More research and documentation of the implementation of alternate assessments

in various environments and its influence on teacher practice and student learning would inform the further development of an effective and useful assessment theory of action. Washington State, in particular, is ready to learn a great deal from assessment research in this area, and the design of this study of the implementation of Washington's WAAS portfolio has been developed for this purpose. Effective implementation of alternate assessments appears to have the potential to influence student, teacher instructional and school practices in the context of improving learning for students with significant disabilities. More documentation is needed about the possible consequences, if any, of implementing alternate assessments, including the WAAS portfolio in Washington. The next section of this report will provide a focus for this inquiry by describing the research methodology used in this study.

CHAPTER 3

Methodology and Process of Inquiry

This chapter will summarize the methods and process of inquiry used in this study. Research in special education as a field is particularly complex (Odom, Brantlinger, Gersten, Horner, Thompson, & Harris, 2005). Odom and colleagues (2005) assert that educational programs and placements can differ significantly for students with disabilities and students with significant disabilities are often grouped together into specific classrooms. The implication for special education research is that methods should match the research questions while providing a rich context in order to identify effective practice (Odom et al., 2005). A rationale is provided for using quantitative methods in phase one and qualitative methods in phase two of the study in this chapter. The two phases and inquiry strategies for each are described in detail, including subject selection, analytic techniques, and possible ethical concerns and limitations.

A Rationale for Methodological Approaches

Both quantitative and qualitative methods were employed during this research study. Reasons for the use of each method and the intended use of quantitative survey analysis in phase one to provide a focus during the case study phase will be discussed.

Quantitative Survey Approach

Studies involving the use of surveys have been considered to be an objective

method to capture perception information (Mills, 2003). Since teachers are highly involved in the administration of the portfolio alternate assessment (Kampfer et al., 2001), it seems logical to capture teachers' views and perceptions of the portfolio with survey assessment procedures. The survey method of inquiry has been used in many states, including Washington, to gather information about teacher attitudes about and evaluation of alternate assessments. Surveys were distributed at WAAS portfolio scoring institutes and at alternate assessment training sessions conducted around Washington (Johnson & Arnold, 2004). Analysis of differences between the state survey results in Kentucky (Kleinert, Kennedy & Kearns, 1999) and the first Washington teacher survey in 2001 was used to prompt changes in professional development topics and training materials for teachers in Washington (Office of Superintendent of Public Instruction, http://www.k12.wa.us/assessment/altassess.aspx). Washington surveys on alternate assessment conducted in the first two years of the program contained items to capture information about implementation, such as how much time and effort was needed to compile the portfolio and perceptions of general benefit to the student. These early state-wide surveys did not collect perceptions about a number of other programmatic and teacher variables, such as student participation in standards-based activities, how well IEP goals linked to the general curriculum, or appropriate instructional delivery of academic content.

The 2003 WAAS portfolio survey distributed at fall workshops was the first state attempt to capture perceptions of specific impacts of the alternate assessment on instructional programs and student learning in Washington (see Appendix A). The 2003

survey data provided baseline information about possible impacts and was selected for secondary analysis in the first phase of this study for precisely this reason. Although the 2003 workshop attendees included both special education teachers and administrators, the secondary survey analysis was narrowed to examining only teacher responses. Disaggregation of survey data for different teacher groups was also undertaken. The rationale was to use this teacher survey information about perceived portfolio impacts to inform an in-depth qualitative study of portfolio implementation for three students and their teachers, specifically in the development of interview probes and observation forms. While administrators' surveys may have provided some views on potential WAAS impacts in classroom practice, the research questions for phase two focused on classroom level changes in instruction and improvement of student performance in three cases. Thus, quantitative analysis of the 2003 teacher survey data was conducted to illuminate any confounding or contradictory evidence that may be further explored in teachers' classrooms, IEPs, and programs. The rationale for using qualitative methodologies in the second phase of this inquiry is summarized below.

Qualitative Case Study Approach

Odom and colleagues (2005) assert that using more than one research methodology is important in special education research The basic goal of qualitative research is to discover meaning in a phenomenon or particular context (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Merriam, 1998). In addition, Brantlinger and colleagues (2005) state that using qualitative methods "do produce

scientific-based evidence that can inform policy and practice in special education" (p. 195). The use of interview, observation, and document review are the particular qualitative tools used in the case study phase of the inquiry to provide a rich description of the process of administering the WAAS portfolio in three cases and to identify potential impacts on special education teachers and students, either intended or unintended, as a result of implementing this alternate assessment in Washington. The rationale for each method is described below.

Interviewing is the best technique to use when wanting to know what is on someone's mind (Patton, 1990) or to get a special kind of information. The interview protocols, informed by the 2003 survey analysis, covered four main areas: experiences with the portfolio, impact on educational programs, impact on student learning, and contributing factors. First, in-depth interviews were intended to provide a rich description from both teachers and parents in 2005 of how the WAAS portfolio assessment had been implemented during the 2003-2004 school year. Secondly, the purpose of the teacher interviews was to explore any changes in educational programs and student achievement following portfolio implementation. The reason for interviewing parents was to provide an additional perspective on classroom changes and to capture any changes observed outside of the classroom. Finally, parents and teachers were asked to identify what they felt were contributing factors for any changes they had stated. The primary reason for conducting interviews was to establish detailed baseline information of how the portfolio was implemented and what impacts may have occurred. Two other forms of data collection were also used to confirm or clarify responses provided in the interviews. The

rationale for classroom teacher and student observations is described first.

Some of the earliest qualitative research utilizing careful observation has had an important impact on special education studies (Brantlinger et al., 2005). For these three cases, classroom observations were designed to explore the delivery of standards-based instruction and student participation in these academic activities. The intent was to examine the level of access to the general academic curriculum and student engagement as well as to check for instructional alignment with lesson plans and IEP goals through a series of three observations conducted over a period of two months. Classroom observations of the selected students participating in instructional activities based on reading, writing, or mathematics were also intended to confirm or disconfirm information collected during interviews.

Finally, archival document reviews were included in phase two of this study in order to provide additional evidence of alignment between curriculum, instruction, and the alternate assessment portfolio. The most current IEP, as well as two the most annual IEPs for each student, were reviewed to look for additional documentation of goals and objectives linked to content standards, evidence of changes in student access to the general curriculum over time, and improvement of student progress toward meeting IEP goals linked to state standards. In each case, teachers offered to share the scored portfolios from the previous year and additional field notes were taken on the IEP skills showcased for each content area entry. Each of these data collection methods was selected in order to gather detailed information on implementing the WAAS portfolio and any impacts of this alternate assessment in the context of school reform. The detailed

accounting of the methodology employed in each phase of this study will be described in the following text.

Methods and Procedures

The specific methods and procedures chosen for this research study were designed to complement the data collected in each phase and to strengthen confidence in the findings. The description of the methods used and the procedures followed are detailed in the following sections.

Design of Secondary Survey Analysis

In phase one of this study, all existing state surveys with educators involved WAAS portfolios were examined. Only one set of surveys conducted in 2003 included items for educators to indicate the level of any program changes as students and teachers participate in the WAAS alternate assessment. Since the purpose of this research study is to collect information on the impacts of implementing the WAAS portfolio, the results obtained from analyzing responses collected on these statewide WAAS educator surveys in the fall of 2003 formed the basis for secondary analysis.

The first step of the analysis was to review the demographic information of attendees. Of the 550 workshop participants, 130 returned the survey. Nine surveys were incomplete and were not considered in this analysis. Of the remaining 121 respondents, 71 were special education teachers, 28 administrators, 16 specialists and 6 marked other. The field of survey data was then narrowed to include only the 72 teacher responses to

inform the development of teacher interviews, IEP document review forms, and classroom observation protocols.

The third step of the analysis was to determine which survey items provided information related to the research questions for this study. After consultation with the state research director to look for agreement in which survey items might provide meaningful information to address this inquiry, the data set was further restricted to responses on six targeted survey items focused on perceptions of educational change. Secondary analysis of selected survey items with demographic data then commenced using spreadsheet sorting and summarizing functions. Hand tallies and a calculator were also employed to conduct the analysis for teacher subgroups. Survey item results which did not provide enough information about impacts of the portfolio or which differed by teacher subgroup were noted. Data was disaggregated to isolate teacher responses on these six items looking for trends as well as surprising results between subgroups of survey respondents (new teachers versus veteran staff, teachers new to the portfolio versus experienced portfolio teachers). The disaggregation of teacher survey data was designed to explore if more experienced portfolio teachers had perceived greater change in practice over time than new teachers. A list of recommendations to inform phase two of the study was generated. This secondary survey analysis information was used in developing the semi-structured interview questions, observation protocols, and IEP document forms for the second phase of the study.

The purpose of the case study portion of this study was to develop a deeper understanding of the impacts of implementing the alternate assessment portfolio for

students in Washington In this inquiry, rising WAAS portfolio results should theoretically provide evidence that students with significant disabilities are having greater access to the general curriculum and increasing learning in academic content. The design of phase two of this study was intended to pursue evidence of the actual impacts of the portfolio on the programs for three students. The following text provides details of the study design for the phase two case studies.

Case Study Design and Subject Selection

For phase two, several selection criteria were employed to select the three students chosen as potential subjects for the case studies. The 2004 WAAS data base includes the entire population of students who participated in the alternate assessment portfolio during the 2003-2004 school year. Using the WAAS database, the following criteria were applied:

1. Student was enrolled in grade 7 in 2004 and was currently enrolled as a grade 8 student in the school district.
2. Student participated in the alternate assessment portfolio in all three academic content areas (Reading, Writing, and Mathematics).
3. Student met the portfolio standard for proficiency in at least two content areas.
4. Student was classified in one of the following disability category: multiple disability, traumatic brain injury, or autism.

A list of students who met these criteria from the state assessment database was examined for differences in the following two ways: no two students were allowed from the same

teacher's classroom or school district and students were to be selected from different primary disability categories.

Special education directors in school districts for the students on the list were contacted to gain permission to speak with the students' teachers about the study. An effort was made at first to contact school districts within one region of the state in consideration of providing similar contexts for the case studies. It was soon apparent that strategy was difficult to carry out in light of the small numbers of students participating in the WAAS portfolio (less than 1 percent of the tested seventh grade population in most districts) and the small number of students who met the eligibility criteria. Contact was then made with special education directors in larger school districts in other parts of western Washington to increase the likelihood of locating more students who might meet the study requirements. Once the director was contacted, teacher selection criteria were determined: experience as a special education teacher for more than one year and was still the instructor for the student with portfolio scores that had met standard in at least two content areas in 2004 (denoting familiarity with the student and with implementation procedures of the WAAS portfolio). Permission was granted to contact the parents or guardians of the student in the contacted school districts. Written permission to participate in the study was obtained from the director, teacher, and parent before any data was collected. School districts were contacted and until three districts in Western Washington granted permission to proceed and who had the match of student and teacher characteristics. Three teachers and parents of the matched students were invited to participate in the study. After permission was obtained in each case, schedules for

interviews and visitations were arranged for the spring of 2005.

Meanwhile, draft interview probes were piloted with a special education teacher and parent before use in the study. Each teacher and the parent in the study were interviewed separately using the 60 minute semi-structured interview protocols by the end of June 2005. The interview questions and probes were essentially the same for parents and teachers (see Appendix B). During the study, interviews were tape-recorded and transcribed within six weeks of the interviews. Subsequent to the transcription, the actual tapes were destroyed. The interview responses were identified by code so that no teacher or student was personally identified.

The second method of data collection used during the study was observations of the students in their classroom learning environments. Three 30 minute lessons were closely observed over a two month period noting both teacher's instruction and student's behavior during the standards-based activity. Each teacher selected the date and academic content for the observations. Field notes were collected on observation forms during the classroom visits as well as additional notes written directly after each observation. The researcher utilized an observation protocol (see Appendix C) so that consistent descriptions of the focused observations could be summarized in each case.

The third data collection method for each case study consisted of archival reviews of three IEPs: the current IEP in force and the two IEPs chronologically preceding the current IEP. The review of these educational records focused on changes in wording of IEP goals and objectives and their alignment with state standards over time. A standard IEP archival collection form (see Appendix D) was used in these reviews. The teacher in

the first case study shared the student's scored portfolio from the previous year and field notes were taken on the IEP skills and the evidence provided for each content area entry. For consistency, each of the other two teachers were asked and agreed to show their students' portfolios. In both phase one and two, the inquiry and analysis on collected data was conducted with techniques and quality indicators supported by researchers (Brantlinger et al., 2005). The following section summarizes the considerations and actions taken to assure quality and fidelity of the analysis.

Analytic Techniques and Quality of Inquiry

Any research study is only as good as its objectivity. The argument, knowledge of the research focus, data collection, analysis of the research data, and conclusions drawn are critical pieces that will be subject to public scrutiny (Brantlinger et al., 2005; Miriam, 1998). Therefore, factors, such as conceptual development, credibility, dependability, and generalizability, must be considered during the design, implementation, interpretation, and reporting of the study. Each of these factors has been considered and steps were taken in designing the research study for both the secondary analysis of the survey data and the case study phases. A description of the strategies used to strengthen the credibility of results as well as ethical considerations and limitations will be summarized below, beginning with steps undertaken during the survey analysis.

In the first phase of the study, the entire state file from the fall 2003 WAAS teacher survey, including databases, reports, and the actual anonymous surveys was collected and examined. All survey items were compared to the first two research

questions concerning educational change in access to the general curriculum and changes in programs and achievement for students participating in the WAAS portfolio assessment. Six survey items appeared to focus on these research questions. The same review of all 2003 survey items was conducted by the state research director who concurred on which survey items addressed the research questions. This added review strengthens the argument of content and construct validity. Spreadsheet functions and disaggregated summaries were used to analyze similarities and differences in teacher responses on the selected survey items by the level of teacher experience with the portfolio. Data were calculated twice and cross checked with existing summary results from the larger group of respondents. The survey analysis information was used to review, revise, and expand data collection instruments for the case study phase.

The discussion of validity and reliability in qualitative research may take different forms than the discourse about the trustworthiness of a quantitative study. Research results "are trustworthy to the extent that there has been some accounting for their reliability and validity, and the nature of qualitative research means that this accounting takes different forms than in more positivist, quantitative research," (Merriam, 1998, p.198). There are strategies that can be employed to ensure that qualitative research is credible and trustworthy (Brantlinger et al., 2005; Miles & Huberman, 1994). There were four considerations that were infused in the research design for this phase of the study: researcher's position and role; triangulation of data; cross-case analysis; and the data and theory trail from collection to conclusions drawn. Each of these considerations helps to build the argument of trustworthiness in this phase of the study.

Clarification of the researcher's role and responsibilities is the first step. The researcher must realize and state that the interviews, observations, and archival reviews are interpretations of reality and may be subject to the researcher's biases or filters (Merriam, 1998). To strengthen internal validity, protocols were designed for each of these data collection methods in order to collect the data as uniformly as possible in each of the three case studies. Underlying beliefs and potential biases were considered and attempts were made to control for these factors in designing the protocols. These protocols were also subjected to review by the state research director following the survey data analysis phase. The researcher's position as the state Alternate Assessment Specialist was considered and steps were taken to clarify the purpose of the study and role as researcher, not auditor or reviewer of their programs or teaching methods.

Second, triangulation of data can enhance the reliability and validity of research findings (Mills, 2003; Sagor, 2000). Mills (2003) states that researchers should not depend on one single source of data, but should use multiple sources or information in conducting action research. The research design for the study included survey data from seventy one teachers and data analysis was conducted using several subgroup analyses. While conducting the case study phase, survey analysis results were reviewed and reanalyzed in light of the qualitative data being collected in the schools. The case study portion of the study used observation, interviews, and archival documents. Within each case, the data gathered using each of the three collection instruments was compared for confirmation or discrepancies. The next step to build the case for credibility was to analyze the data across cases.

Once the information is analyzed within a case, then the researcher can proceed to cross-case analysis (Miles & Huberman, 1994). A contrasting case model was used in this study. Following the analysis of the case in which the teacher had extensive experience with the portfolio, a set of assertions were drawn based on the analysis information from the data. The analysis of data for the next case in which the teacher was new to administering the WAAS portfolio was compared and contrasted against this set of assertions. The third case analysis for a teacher who had implemented the portfolio for four years was conducted in comparison to the first two.

Standard procedures and an audit trail strategy were implemented throughout the case study phase to increase the trustworthiness of the data being analyzed. During case study analysis, measures included maintaining an audit trail of visitation dates, length of visits, field notes, and data collection forms and digital audiotapes, as well as reviewing data with participants to check for accuracy. Data was collected in separate envelopes for each case and stored in a secure facility during the study. Periodic checks were implemented to confirm that all three kinds of evidence were collected in each case. Both coding and specific procedures for data analysis enhances the generalizability of the findings in multiple case data analysis (Merriam, 1998). Codes were developed and reviewed following the data collection in the first case study. The data was analyzed and charted on a summary sheet by coding category for each school. Strategies of within-case triangulation of data, cross case analysis, and reporting using detailed descriptions of the case study analyses were employed to provide sufficient evidence of interpretations and conclusions. Using these methods can improve confidence in but not guarantee credibility

or trustworthiness. The next section will address some issues that may limit the generalizability of any findings of this study.

Ethical Concerns and Limitations

With any research study, the design methodology can be discussed in terms of relative strengths and limitations (Merriam, 1998). Both secondary analysis of survey data and case study approaches face some limitations in interpreting and using the study data. Discussion of limitations and ethical considerations for both phases of the study have been considered and addressed in this section.

One of the limitations of the study is that the 2003 WAAS perception surveys were administered to a non-random sample of special education teachers, administrators, and other educators attending nine regional state workshops in Washington State. No records were collected on the demographics of attendees in each region or if the survey respondents were representative of the overall group of workshop participants. Furthermore, the focus of secondary survey analysis was narrowed to only teacher responses on six survey items. It would be very imprudent to make judgments about the level of educational change due to impacts of implementing the WAAS based on this small sample size. Because the secondary survey analysis was solely used in developing and refining case study data collection protocols, the use of this information may still be considered valuable in guiding the in-depth case study phase of this inquiry.

Another limitation of the survey data is the nature of the survey items. The purpose of the annual state WAAS surveys was to collect some initial teacher perception

data about implementation of the alternate assessment portfolio and to inform future professional development topics and materials for educators implementing the alternate assessment. The survey items were revised each year by the state alternate assessment specialist and 2003 survey items were added in response to a research article on "What We Know and Need to Know About Alternate Assessment" published in the fall of 2003 (see article by Browder et al., 2003). As a result, the survey provided foundational information that influenced the formation of the research questions of this study. These limitations were considered and analyses only focused on survey data that appeared to be informative for the development of the content of the interview questions, observation protocols, or IEP documentation forms for the case studies in this inquiry.

Selection of the three subjects for the case study may also have some limitations. Selection criteria included the following: be eligible for special education services in particular disability categories, participated in the 2004 state alternate assessment in grade 7 with portfolio scores meeting a proficiency standard, located in close proximity for repeated classroom observations, and had the same special education teacher for at least two years in a row. While the sample is drawn from the population of all students who participated in the WAAS portfolio, it is a purposive, not a random, sample. Even with the small sample size and the difficulty in implementing a sampling plan, these cases and the contrasts among them may produce important evidence in understanding how the alternate assessment portfolio is implemented and how the implementation may be influencing instructional practice and student learning. There are also ethical factors that should be considered in this study.

Several ethical dilemmas may be faced during this research. The researcher's role is "first and foremost to gather data, not change people" (Patton, 1990, p. 354). Several steps in the research design from consideration of biases to uniformity and review of protocols were taken in order to accurately and honestly present the data and findings. The confidentiality surrounding the identification of student demographic information, disabilities and legal requirements for confidentiality of educational records was maintained. Parental and teacher permission was obtained in writing before any data collection occurred. Pseudonyms were used when completing protocols, taking field notes, and in summarizing the research report.

Several steps to control for potential bias were implemented during data analysis. Survey data analysis methods were shared with the state research director to verify the use of the appropriate data and conclusions drawn. Secondly, the case study interviews were initially transcribed by one person and then verified by a second person. A set of themes or assertions were developed following the collection of data in the first case study. Broad themes and corresponding codes in the case study data were developed when the data appeared in multiple places. Reflection on the accuracy of the data collected and assertions made at each step of the analysis and many subsequent reviews of the data and results of analysis were designed to reduce potential bias.

The consequences of conducting the study and the possible impacts on teachers, parents, and students were also considered. The researcher's position as alternate assessment specialist in state government may have potential influence on both the level of participation and the interview responses of the study participants. Therefore, the

following steps were initiated to mitigate any effects of this nature: during the data collection period, I attempted to be neutral and objective whenever possible; detailed notes were shared with the teacher in each case; and I reflected on any possible observer effects following interviews and observations. Care was also taken not to over-generalize or place too much importance on the results of one study in formulating future state policy or professional development training.

Potential Use of Results

The primary significance of this study was to collect qualitative evidence following the analysis of existing perception survey data that may contribute to a deeper understanding of the WAAS portfolio assessment. This type of research is not designed for purposes of generalization but is intended to produce explore and produce evidence of a particular phenomenon with individuals in a particular setting and context (Brantlinger et al., 2005). The data collected during this study focused on laying foundational knowledge to inform future leadership actions at state and school district levels in these main areas of assessment: how three students with significant disabilities may be included in state assessment and accountability systems, how teachers and parents understand the process for implementing the alternate assessment at the classroom level, how curriculum and instruction for these students may or may not be aligned with standards-based alternate assessments, and any impacts on student learning.

While implementing state assessments in the context of school renewal, critical inquiry into this practice may help to overcome some negative effects of assessment in

general. School district and state educational leaders may be able to use results of this type of research to understand how to support teachers in the implementation and reporting of alternate assessments. Research directed at better understanding both intended and unintended effects of implementing alternate assessments in Washington State may also promote greater understanding of professional development needs and inform state and school district policy directions for including and supporting all students in accessing the benefits of standards-based reform. Chapter four summarizes the results of this research and the findings derived from the analysis of the data collected during the study.

CHAPTER 4

Findings

The purpose of this chapter is to provide a comprehensive summary of the results derived from conducting this study on implementing alternate assessments in Washington. These findings will be reported in the following three sections: phase one analysis of teacher surveys, phase two case study findings, and discussion of results.

Teacher Survey Analysis

Educator surveys were conducted by the Office of Superintendent of Public Instruction staff in the fall of 2003 during WAAS portfolio training workshops conducted in nine regions of Washington. The survey return rate from workshop participants was twenty-two percent. For some research analyses, this rate may be considered low, especially when the goal is the estimate population parameters using the sample responses. The goal of a survey analysis in this study was more exploratory and primarily designed to surface portfolio implementation dynamics that could be more fully explored in the case study phase of research. In this sense, a secondary analysis of selected survey data on phase one of this inquiry offer a kind of rough, preliminary findings suggesting if and whether state assessment policy is having any perceived effect on teacher practice as a springboard for deeper inquiry of alternate assessment impacts for individual students with significant disabilities.

While analyzing survey results from other responders may be meaningful, the

focus of this inquiry centers on teacher changes in classroom instructional practices and student progress for those students participating in alternate assessments. Thus, teacher surveys were disaggregated and analyzed. In addition, survey items were examined and selected to determine which items might provide baseline perceptual information of educational changes that may be occurring in the classroom. Teacher demographic data was gathered and information analyzed from six survey items about education change and the reasons for perceived changes. First, demographic information about teacher survey respondents will be reported. The results of the secondary analysis of the selected survey items follow.

Demographic Information

Of the121 completed surveys which were returned, 71 were submitted by teachers. Other respondents included 28 administrators and the remaining 22 were completed by special education staff or other educators (see Table 1). While administrators and other educators may provide important information in the survey data about educational changes, teachers may provide the best insights into classroom changes for their students who participate in alternate assessments. The secondary survey analysis is limited to teacher responses based on this premise.

Table 1. Survey Respondents by Position and Years in Education

Current Position	N	0 to 5 years in education	6 to 10 years in education	11 to 15 years in education	More than 15 years
Teacher	71	26/37%	9/13%	12/17%	24/34%
Administrator	28	0	0	5/18%	23/82%
Specialist	16	5/31%	1/6%	2/13%	8/50%
Other	6	0	1/17%	2/33%	3/50%
Total	121	31/26%	11/9%	21/17%	58/48%

Since the second phase of this inquiry focuses on the classroom implementation of the WAAS portfolio, the scope of the secondary analysis was narrowed to teacher survey responses only. Of the 71 teacher surveys, about one third of the teachers (37%) had educational careers of five or fewer years. The next largest group (34%) had more than 15 years of classroom experience. Nine of the teachers did not answer survey items related to educational changes and were not included in the secondary analysis of teacher perceptions. All analyses were based on the surveys from the remaining 62 teachers.

Overall teacher survey responses were examined, as well as for teachers who had some familiarity with the portfolio process in comparison with teachers who had relatively little portfolio experience. Because teachers had stated in regional workshops that the portfolio seemed easier and took less time after doing the process a few times, I wanted to look at the survey results to see if experienced portfolio users would have different opinions of any program changes and the causes for those changes than for teachers new to implementing the WAAS portfolio or "novice" teachers. Ten surveys were completed by teachers who had implemented the alternate assessment for at least two years (see Table 2), which permitted a comparison with the remaining 52 novice teachers, in addition to analyses focused on all teacher respondents.

Table 2. Teacher Surveys by Years in Education and Years of Portfolio Experience

Portfolio Experience	0 to 5 years in education	6 to 10 years in education	11 to 15 years in education	More than 15 years	Total
None	14	4	3	7	28
1 year	7	1	4	12	24
2 years	0	1	1	2	4
3 or more	1	1	2	2	6
Total	22	7	10	23	62

The results of the analysis of surveys from 52 novice portfolio teachers as compared to the 10 experienced teachers include what each group reported about the perceived level of change in educational practices in different survey items. Secondly, analysis was conducted on what the two groups of teachers saw as reasons for each of those changes. The survey items which were concerned with perceptions of educational change will be described in the next section of this analysis.

Educational Changes During Participation in WAAS

A first analysis of the survey data suggests how much change (if any) teachers perceived to have occurred during their WAAS participation and what particular kinds of change were seen. Specifically, this set of survey items asked respondents to indicate the level of change in seven areas as students and teachers in special education participated in the WAAS portfolio. Respondents were asked to rate the level of change on a modified Likert scale, from "Much Less" change (=1) to "Much More" change (=5) (see Appendix A for the complete survey). Respondents were asked to circle the number that indicated the level of change, if any, in the areas below as teachers in special education participated in the WAAS alternate assessment. Table 3 provides an example from this part of the survey.

Table 3. Example of a Survey Item Dealing with Educational Change

Please circle the number that indicates the level of change, if any, in the areas below as students and teachers in special education participate in the WAAS alternate assessment:	Much Less	Less	No Change	More	Much More
1. Student access to the general curriculum (EALRs).	1	2	3	4	5

Six of seven items listed in this part of the survey (1, 2, 3, 4, 6, 7) were related closely to the research questions for phase two of this inquiry and, hence, were used for the phase one analysis.

- Items 1 and 4 probed about perceived changes in access to the general curriculum.
- Items 2 and 3 asked respondents to note changes in alignment between curriculum, instruction, and assessment.
- Items 6 and 7 inquired about changes in student use of IEP skills in other contexts and settings and related mastery of those skills.

Item 5 was concerned with teacher perceptions of change in student inclusion in general education classes. The results from this item were not included or analyzed because instruction and student performance, rather than placement or location of instruction, is the focus of this study.

As Table 4 indicates, many teachers marked a 3 indicating no change on particular survey items. Since the goal of this inquiry is to identify and understand impacts as students and teachers participate in the WAAS portfolio, I took this response to reveal little, except to establish that certain teachers saw minimal evidence of impact. These responses, therefore, were not included in the secondary analysis reported in the following sections. In addition, very few survey participants felt there was "Much Less" or "Less" change (no more than 4 teachers selected a 1 or 2 on any one item). These responses were not included in the analysis below due to the small number and the difficulty in interpreting this end of the Likert scale (their responses generated questions, such as: Much less than what? Less than no change?).

Table 4. Teacher Survey Respondents' Perceptions of the Degree of Educational Change During Participation in WAAS

Item	Much Less or Less	No Change	More or Much More	Total
1. Student access to the general curriculum (EALRs).	4 (6.5%)	29 (47.5%)	28 (46%)	61* (100%)
2. Linking of the IEPs to the EALRs or EALR Extensions.	0 (0%)	14 (23%)	48 (77%)	62 (100%)
3. Embedding portfolio elements into instruction.	1 (2%)	13 (21%)	48 (77%)	62 (100%)
4. Participation of students with disabilities in standards-based activities.	2 (3%)	26 (42%)	34 (55%)	62 (100%)
6. Student application of IEP skills (in different settings, with different people, etc.) that are linked to the EALR Extensions.	0 (0%)	20 (32%)	42 (68%)	62 (100%)
7. Student achievement on IEP goals and objectives that are linked to the EALR Extensions.	0 (0%)	27 (44%)	35 (56%)	62 (100%)

*Note: One respondent left item 1 blank.

Some expected and unexpected data emerged from the survey analysis shown in this table. The highest number of respondents perceived that "More" or "Much More" change was occurring in both linking IEPs to state standards and embedding the portfolio elements into instructional activities. Items 2 and 3 are similarly addressing issues of alignment of curriculum, instruction guided by the IEP goals, and alternate assessment and I would expect similar results on each item. However, items 1 and 4 are both focused on student participation in academic lessons and the responses were markedly different. For items 1 and 4 dealing with issues of student access to academic curriculum, fewer than half of the respondents (28) noticed a change in students' access to the general curriculum while 34 perceived a change in student participation in standards-based activities. In the last set of linked items, two thirds of the respondents perceived a change

in student application of IEP while only half thought student achievement on IEP skills linked to EALR extensions had changed "More" or "Much More" (items 6 and 7).

Several questions come to mind as a result of this analysis: Why do more teacher respondents see changes in linking IEPs to state standards and fewer perceive changes in student access to the general curriculum? Why do fewer respondents perceive that students participate in standards-based activities but a greater number of respondents see students applying IEP skills linked to the standards? What factors may account for these differences in perception on related survey items? While these and other questions may be addressed in phase two of this study, further survey analysis may provide some additional direction for the remainder of this study. Perceptual data on the reasons for any changes in each survey item were analyzed and the results are examined below.

Perceived Reasons for Changes During Participation in WAAS

The next survey section asked the respondents who indicated changes in items 1-7 to note any and all reasons for the perceived changes. The respondents were given the following as possible reasons for changes: "IDEA '97", "ESEA", "District Requirement", "Participation in WAAS", "Professional Development", and "Other". About half of the teachers indicated multiple reasons for change on each item and only two respondents indicated other reasons for educational change on any of the items.

Two anomalies appeared in the responses concerning reasons for change. First, some teachers indicated "No change" on one or more of items 1-7 (by circling the number 3) and still marked reasons for changes in the next section of the survey. Because

they should have left the "reasons for changes" items blank, their responses were not counted in the analysis. Second, other teachers indicated they perceived some educational changes had taken place (by circling 4 or 5 on items 1-7) but did not provide any reasons in response to the follow-up items. Although their responses were included in the first part of the survey analysis, those who did not indicate at least one reason were not added to the N in the following tables. Table 5 summarizes the number of times each reason was checked by survey respondents who correctly followed directions. Consequently, the N in Table 5 and ensuing tables reflects *only* those respondents who indicated "More" or "Much More" change in items 1-7 and who indicated one or more reasons for educational change. For this reason, the analysis can only be suggestive rather than representative of the entire teacher respondent sample).

Table 5. Survey Respondents' Perceptions of Reasons for Educational Changes During WAAS Participation

Reasons for change:	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other	N*
1. Student access to the EALRs.	5 (28%)	5 (28%)	8 (44%)	14 (78%)	9 (50%)	1 (6%)	18
2. Linking of IEPs to EALR Extensions.	7 (22%)	6 (19%)	10 (31%)	19 (59%)	17 (53%)	1 (3%)	32
3. Embedding portfolio elements into instruction.	3 (9%)	4 (12%)	3 (9%)	24 (71%)	15 (44%)	2 (6%)	34
4. Participation in standards-based activities.	4 (19%)	4 (19%)	4 (19%)	11 (52%)	14 (67%)	0 (0%)	21
6. Student application of IEP skills.	4 (17%)	3 (13%)	5 (22%)	13 (57%)	12 (52%)	2 (9%)	23
7. Student achievement on IEP skills.	6 (29%)	3 (14%)	3 (14%)	11 (52%)	12 (57%)	1 (5%)	21

* N= the number of respondents who marked "More" and "Much More" change on this survey item and who gave one or more reasons for the change. Row percentages do not add up to 100% because respondents could indicate more than one reason for change.

Preliminary patterns began to emerge from this table for the overall group of respondents as well as for each subgroup. Most teachers indicated that participation in the portfolio and professional development were key reasons for educational changes. District requirements, ESEA, and IDEA '97 regulations were also listed by many teachers, albeit a minority, as reasons for change on some items. In order to address questions generated from the Table 5 analysis, I examined the reasons for educational change survey data in two ways.

I looked at the results for each pair of items dealing with a particular area of potential change: access to the general curriculum; alignment of curriculum, instruction, and assessment; and application and achievement of IEP skills linked to state standards. Survey data can also be disaggregated by other factors, such as length of experience with the WAAS portfolio process, to tease out any additional information that might explain the differences on survey responses for related item pairs. Thus, the survey analysis includes a breakout including "novice" teachers (those with little or no experience with the portfolio) and "experienced" teachers (those with two or more years with the portfolio).

Access to the general curriculum items. Items 1 and 4 concern perceived changes in student access to the general curriculum (EALRs) and participation of students with disabilities in standards-based activities, respectively. Of the 46 percent of the responders (28 teachers) who indicated more or much more change in access to the EALRs (item 1), 18 teachers gave one or more reasons for the change in access. As shown in Table 5, participation in WAAS was the most frequently noted response (78 percent) followed by

professional development with 50 percent. District requirements also appeared to be a factor to 44 percent of the teachers. These results seem to point to a possible convergence of district pressure, professional development, and student and teacher experiences as they strive to document access to academic content in portfolio-driven activities.

A similar pattern appeared regarding reasons for change in participation in standards-based activities (Item 4). Of the 34 teachers who noted more or much more change in participation of students with disabilities in standards-based activities, 21 indicated reasons for change. Among these teachers, professional development and participation in WAAS were once again the most frequently noted reasons for change (67 percent and 52 percent, respectively). No other reason was suggested by more than 20 percent of the respondents. As before, these results underscore the possible influences on teachers of learning by doing (through direct participation) and other forms of professional development.

To get more insight into the ways that experience with the portfolio might have influenced teachers' perceptions of reasons for change, I disaggregated the survey results to compare those teachers who had two or more years of experience administering the portfolio with teachers who had little or no portfolio experience. As the row percentages in Table 6 suggest, there were not large differences between the perceptions of both groups in Item 1, even though the small numbers of teachers in these analyses preclude a definitive or even statistically meaningful comparisons. One possible difference, worth probing in case study work or future surveys with larger samples, teachers with more portfolio experience were much more likely (67 percent versus 20 percent) to note

"ESEA" requirements as a possible influence.

Table 6. Reasons for Change in Student Access to EALRS (Item 1), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change in student access to the EALRs	N=	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	15	4 (27%)	3 (20%)	7 (47%)	11 (73%)	7 (47%)	1 (7%)
Experienced portfolio teachers	3	1 (33%)	2 (67%)	1 (33%)	3 (100%)	2 (67%)	0 (0%)
All teachers in sample	18	5 (28%)	5 (28%)	8 (44%)	14 (78%)	9 (50%)	1 (6%)

Note: Row percentages do not add up to 100% because respondents could indicate more than one reason for change.

Once again, a similar pattern appeared from a disaggregated review of reasons for perceived change in students' participation in standards-based activities (Item 4) as shown in Table 7. However, a much smaller percentage of "novice" teachers noted participation in WAAS as a perceived reason for change than "experienced" teachers (44% and 80%, respectively). This difference may also warrant some further scrutiny in case study and survey research.

Table 7. Reasons for Change on Participation in Standards-Based Activities (Item 4), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change in participation in standards-based activities	N=	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	16	3 (19%)	3 (19%)	3 (19%)	7 (44%)	11 (69%)	0 (0%)
Experienced portfolio teachers	5	1 (20%)	1 (20%)	1 (20%)	4 (80%)	3 (60%)	0 (0%)
All teachers in sample	21	4 (19%)	4 (19%)	4 (19%)	11 (52%)	14 (67%)	0 (0%)

Alignment of curriculum, instruction, and assessment items. Items 2 and 3 involve surveying perceptions of changes in linking of the IEPs to the EALRs or EALR Extensions and on embedding portfolio elements into instruction, respectively, which were considered as indicators of alignment between what is taught and what is tested on the WAAS portfolio. Of the 77 percent of the responders (48 teachers) who indicated more or much more change in linking IEPs to state standards (Item 2), 32 teachers gave one or more reasons for the change. Once again, as shown in Table 5, participation in WAAS was most frequently noted reason (59 percent), followed by professional development (53 percent), as reasons for change on item 2. In addition, 31 percent of the respondents felt that district requirements may be a reason for change in linking IEPs to EALRs or EALR Extensions. This data suggests that district policies to align IEPs to the EALRs as well professional development and participation in WAAS may affect teachers' perceptions of changes in alignment. These results further reinforce the pattern suggested by the analysis of the first item pair.

Similar results were found in analyzing changes in embedding portfolio elements into instruction (Item 3). Of the 77 percent of the responders (48 teachers) who indicated more or much more change on embedding portfolios into instruction, 34 provided one or more reasons for change. For all teachers indicating reasons, 71 percent indicated that participation in WAAS was a reason while 44 percent indicated that professional development was a perceived reason for change. No other reason was mentioned by more than a small number of teachers. These results suggest that professional development about the portfolio process and experience in implementing the WAAS are the primary

drivers of possible changes in embedding alternate assessment into instructional practice.

Disaggregation of educational changes in alignment for "novice" and "experienced" teachers on Items 2 and 3 are summarized in Tables 8 and 9. Table 8 provides detail about reasons for changes on linking IEPs to EALRs by subgroup. Although most teachers both groups perceive participation in WAAS and professional development as reasons for change, it appears that experienced teachers indicated a wider array of factors influencing change than novice teachers did. The largest gap occurred in perceptions of "ESEA" as a reason for change between experienced and novice teachers (43 percent versus 12 percent, respectively). Gaps between percent of experienced and novice teachers' responses indicating change due to "District Requirement" were also noted. These results hint at a possible connection between perceived changes in linking IEPs to state standards and local school district conditions and practices in response to federal mandates. A deeper probe into contextual factors in relation to accountability systems seems to be indicated for future research.

Table 8. Reasons for Change on Linking IEPs to EALR Extensions (Item 2), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change on linking of IEPs to EALR Extensions	N =	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	25	5 (20%)	3 (12%)	7 (28%)	14 (56%)	14 (56%)	1 (4%)
Experienced portfolio teachers	7	2 (29%)	3 (43%)	3 (43%)	5 (71%)	3 (43%)	0 (0%)
All teachers in sample	32	7 (22%)	6 (19%)	10 (31%)	19 (59%)	17 (53%)	1 (3%)

Note: Row percentages do not add up to 100% because respondents could indicate more than one reason for change.

Item 3 asked teachers to indicate perceived reasons for change in embedding portfolio elements into instruction. The breakdown of survey results by experienced and novice portfolio teachers, displayed in Table 9, reinforces earlier noted patterns. Participation in WAAS and professional development remain the most often indicated reasons for change by both experienced and novice teachers. Although no large differences were noted between these groups, case study or survey research may yield further information about how teachers with different experience levels embed portfolio elements into instruction and what kind of impacts, if any, embedding alternate assessment components into classroom routines may have on instruction.

Table 9. Reasons for Change on Embedding Portfolio Elements into Instruction (Item 3), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change in embedding portfolio elements into instruction	N=	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	26	2 (8%)	2 (8%)	2 (8%)	17 (65%)	12 (46%)	2 (8%)
Experienced portfolio teachers	8	1 (13%)	2 (25%)	1 (13%)	7 (88%)	3 (38%)	0 (0%)
All teachers in sample	34	3 (9%)	4 (12%)	3 (9%)	24 (71%)	15 (44%)	2 (6%)

Note: Row percentages do not add up to 100% because respondents could indicate more\ than one reason for change.

Student generalization of skills and student achievement items. Survey items 6 and 7 concern educator perceptions regarding changes in student application of IEP skills (in different settings, with different people, etc.) that are linked to the EALR Extensions and student achievement on IEP goals and objectives that are linked to the EALR Extensions, respectively. Of the 68 percent of the responders (42 teachers) who indicated

more or much more change in student application of IEP skills, 23 teachers gave one or more reasons for the change in student generalization of skills. As shown in Table 5, of the 23 teachers who indicated reasons for changes in student application of IEP skills, 57 percent indicated participation in WAAS followed by professional development with 52 percent. Five or fewer teachers indicated any other reasons for change. Again, the potential influence of professional development and experience implementing WAAS on educational change is suggested and attention to these factors in research appears to be indicated by the results on this survey item.

Of the 56 percent (35 teachers) who noted more or much more change in student achievement on IEP goals and objectives (item 7), 21 provided one or more reasons for the change in student achievement. For those respondents providing reasons, 57 percent indicated professional development as one reason for change in student achievement on IEP goals and objectives, while 52 percent indicated that participation in WAAS was a perceived reason. Six teachers (29 percent) also felt that "IDEA '97" had potential impacts on changes in student achievement on IEP goals linked to the EALRs. These results also indicate the need for further exploration and research into why teachers may perceive federal special education legislation as a pressure to change instructional programs so students could practice IEP skills in other settings with some level of success.

Disaggregated data for experienced and novice portfolio teachers was also analyzed on these two items in order to gain more evidence of whether or not the WAAS portfolio experience may have influenced teachers' perceptions of reasons for changes in

student use of IEP skills and achievement. Both participation in WAAS and professional development were the most noted reasons given by both experienced and novice teachers. Although the results are not conclusive due to small numbers, the disaggregated results in Table 10 also seem to suggest that some novice teachers (24 percent) feel that district requirements are pushing the reform agenda, while 33 percent of the experienced teachers perceive that "IDEA '97" is another reason for changes in student generalization of IEP skills. Table 11 data indicate a higher percentage of experienced teachers (50 percent) seeing "IDEA '97" as a reason for change in student achievement of IEP skills than novice teachers (20 percent). In addition, a greater percent of experienced portfolio teachers (83 percent) perceive participation in WAAS as a reason for change in student achievement than do novice teachers (40 percent). These analyzed responses strengthen the notion that perhaps portfolio experience and other forces in local contexts may be at work in influencing perceptions of changes in student programs and achievement.

Table 10. Reasons for Change on Student Application of IEP Skills (Item 6), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change on student application of IEP skills	N=	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	17	2 (12%)	2 (12%)	4 (24%)	8 (47%)	9 (53%)	2 (12%)
Experienced portfolio teachers	6	2 (33%)	1 (17%)	1 (17%)	5 (83%)	3 (50%)	0 (0%)
All teachers in sample	23	4 (17%)	3 (13%)	5 (22%)	13 (57%)	12 (52%)	2 (9%)

Note: Row percentages do not add up to 100% because respondents could indicate more than one reason for change.

While the pattern for agreement on the top two reasons already noted with other

survey items appears to hold true on these two items, there are some important differences between novice teacher and experienced teacher responses of reasons for changes in student performances to consider. First, the percentage of novice teachers' perceptions of district influence in these changes (24 percent) may indicate the need for more information on district factors which influence new teachers in supporting student use of IEP skills. Another area which may be worth exploring in case study research is the premise that experienced teachers' perceptions of changes in student achievement occur as a result of federal requirements in IDEA '97 as well as professional development experiences once teachers have implemented the portfolio for at least two years. The implications and actions taken as a result of these survey analyses in this research study are reported next.

Table 11. Reasons for Change on Student Achievement on IEP Skills (Item 7), Disaggregated by Teachers' Experience with the Portfolio

Reasons for change in student achievement on IEP skills	N=	IDEA '97	ESEA	District Require	Part. in WAAS	Prof. Dev.	Other
Novice portfolio teachers	15	3 (20%)	1 (7%)	1 (7%)	6 (40%)	8 (53%)	1 (7%)
Experienced portfolio teachers	6	3 (50%)	2 (33%)	2 (33%)	5 (83%)	4 (67%)	0 (0%)
All teachers in sample	21	6 (29%)	3 (14%)	3 (14%)	11 (52%)	12 (57%)	1 (5%)

Note: Row percentages do not add up to 100% because respondents could indicate more than one reason for change.

Use of Survey Analysis to Inform Phase Two Case Study Design

The results of the secondary survey analysis on six survey items yielded information that was helpful in shaping the inquiry in phase two of this research study, as

well indicating some ideas for future research inquiries. The analysis of six survey items for all teacher respondents highlights three main points. More teachers (77 percent) perceived some level of change on items 2 and 3 concerning alignment between curriculum, instruction, and assessment than on other survey items. Second, participation in the WAAS portfolio assessment and professional development were the two most often reported as reasons for educational changes on all survey items. It was noted that teachers marked several factors as reasons for educational change and data on the relative importance of each factor was missing. The third conclusion was that none of the survey items can provide an in-depth explanation of what changes have occurred, how any changes have been implemented, and what factors may have influenced or caused those changes to occur. The design for the case studies was amended to address each of these findings and these changes are summarized below.

Following the review of survey results for both novice and experienced teachers, I used them to refine interview probes, observational protocols and archival reviews planned for the case study research. Survey analysis conducted for two subgroups noting any differences in responses for teachers new to implementing the WAAS portfolio and for teachers who had two or more years of experience with the portfolio also led to a number of revisions to the case study instruments. Results on items 6 and 7 strengthened the rationale for conducting a review not only for the presence of academic content goals in IEPs but checking for student progress on those goals.

To enrich the depth of the information gathered during the qualitative phase of this inquiry, relevant probes were developed for the interview protocols and some

secondary questions drafted to discern the type and level of alignment between IEPs, instruction, and the WAAS portfolio. Secondary interview probes were drafted and designed to better understand the role and level of influence of each factor in educational change. Observation protocols were reviewed and a list was developed of what evidence of alignment and student learning might be collected during classroom observations and in the historical review of IEPs. All of these actions were taken to address the findings of the secondary analysis of survey data for all teacher responses. Further survey analysis of teacher subgroups prompted additional recommendations in the following text.

Three case studies were conducted with teachers, parents and students in school districts following the refinements to the case study instruments. Following are summaries of the results arising from data collected during the three case studies.

Case Study Findings

Case studies provided details on how the alternate assessment portfolio had been implemented for three students during their seventh grade year by their teachers. Because the WAAS portfolio assessment represented a fundamental shift from functional to more academically-based instruction, the case study inquiries documented any changes in program for these students. Data was collected on the students' programs in the year following the seventh grade administration of WAAS. Three data collection instruments were utilized to form the basis for the findings reported below: teacher and parent interviews, student observations, and review of Individualized Education Programs (IEP) over three years. All three teachers also spontaneously shared their students' seventh

grade portfolios and, thus, field notes taken on the contents of the WAAS portfolio will be included in this summary.

Each case study will be described first in terms of context: school and school district demographics, teacher characteristics, and student characteristics. Secondly, findings for that case will be reported and grouped under five headings: student participation in the portfolio; teacher expectations for performance; access to reading, writing, and mathematics curriculum; alignment of curriculum, instruction, and assessment to academic content; and use of assessment data to improve instructional practices and student learning. Third, teacher or school district conditions or actions that may appear to have influenced or enabled the level of participation in the WAAS portfolio in 2003-2004 will be summarized. Following the findings for each individual case, a cross-case analysis of all three cases will be reported.

Case Study A

School District A is located in southwest Washington and the school district educates approximately 7,500 students in grades K-12 of which 14.8 percent are served in special education programs. During the 2003-2004 school year, 583 seventh grade students were tested including four students who participated in the state assessment system using the WAAS portfolio.

This case study was situated in one of two middle schools in the district. All students with significant disabilities enrolled in grades 6-8 were bused to this self-contained classroom which was remodeled several years ago to accommodate specialized

equipment and staffing for student accessibility and supports in learning. Five staff members work with eight students throughout the day both in the classroom and around the school. The classroom layout was not typical—a sofa in one corner, mats on the floor for physical therapy and a number of study carrels were set up around the walls. Kitchen and laundry areas were also situated in parts of the classroom. Staff included a teacher, physical therapist, and three paraeducators, all moving around the room instructing and directing students. Speech language pathologists and nursing staff also dropped in to assist the students on a regular basis. Students were engaged in activities using a variety of supports from wheel chairs to communication devices and computers.

Andrew (pseudonyms used for all study subjects), a significantly disabled student with a diagnosis of autism and mental retardation, submitted a WAAS portfolio. Andrew is13 years old and does not, for the most part, use meaningful oral language. He can select a picture from a group of three when he wants something. "He needs assistance in all that he does," according to his group home supervisor, Mrs. Jones. Andrew has been living in the group home with Mrs. Jones since 2001. Mrs. Jones works with Mrs. Foster at the middle school in evaluating Andrew's skills at the group home. Mrs. Foster has worked for the school district for 12 years, five as a middle school art teacher and the last seven years teaching students in the life skills program. Mrs. Foster has known and taught Andrew for three years, including last year during the implementation of the WAAS portfolio assessment. She has had lots of experience implementing the WAAS portfolio throughout the past six years, from the first pilot to the present WAAS portfolio. Mrs. Foster has also served on a state advisory panel and a special education assessment

leadership team providing professional development to teachers implementing the alternate assessment in the state. Her expertise and experience is highly regarded by her colleagues and she fields many questions, among other things, about how to involve students in the alternate assessment process.

Andrew's participation in the portfolio. The WAAS portfolio is intended to belong to the student, rather than the teacher. To promote this concept, training was provided to teachers regarding the student's ownership and participation in the portfolio process. In reviewing Andrew's 7th grade scored portfolio, it was evident that he contributed to the evidence with the assistance of his teacher. In order to fully appreciate the teacher planning and support needed for student involvement in the portfolio, a brief description of the portfolio components and evidence is warranted.

The portfolio is based, in part, on showing evidence of student progress on IEP skills over time. Teachers were trained to select one IEP skill to feature in each portfolio content entry. Therefore, it is important to review the entire IEP to better understand Andrew's skills and the possible ways he could participate in the portfolio process. Andrew's IEP goals across the last three years have focused on use of communication systems and following directions to complete tasks.

In the seventh grade, Andrew's IEP goals were to communicate with a Picture Exchange Communication System (PECS), to increase independence on task completion, and to make choices of free-time activities. For example, Andrew's communication goal stated that he would communicate using pictures in 9 out of 10 trials. The PECS is a set of cards with an associated word or phrase printed on the cards. Andrew had previously

used objects to communicate (such as picking up a cup to indicate he wanted a drink) and in the seventh grade, he was learning to use PECS, a more symbolic communication system (such as a picture of a cup with the word "drink" on the card). Mrs. Foster chose the IEP communication skill for the portfolio reading entry because Andrew would be learning new words using PECS cards. Andrew participated in learning activities designed to increase the number of PECS symbols he could understand and use. Teachers or paraeducators observed his performances and recorded the number of times Andrew correctly used PECS cards. This observational data sheet for multiple days was then copied and included in the portfolio evidence for the reading entry.

Mrs. Foster also stated that she involved the students in the actual construction of the portfolio. For example, Mrs. Foster involved Andrew in filling out daily monitoring reports evaluating his progress. She commented, "As far as understanding what was going on, not sure if he had that there but we tried to find opportunities that he could be a part of that." When reviewing Andrew's portfolio from the seventh grade, several daily progress monitoring forms were included. These monitoring forms tallied the accuracy and the number of times Andrew used his communication system and the number of times he followed directions during the school day. Mrs. Foster said that Andrew had selected the progress evaluation forms to be included as evidence in the portfolio. These observations and interview records suggest a high level of understanding on the part of Mrs. Foster regarding student ownership and participation in the portfolio assessment.

Teacher expectations for performance. Mrs. Foster conveys high expectations for Andrew in number of different ways. She spoke about collecting evidence in the portfolio

that demonstrated the students' progress and use of skills in general curriculum areas of reading, writing, and mathematics. Many teachers never think about assessing students with significant disabilities in any areas other than functional life skills, such as dressing or feeding themselves. Mrs. Foster reflected on the year when she was asked to start a new district program for students with significant disabilities, "I participated the year the pilot came out so my approach to designing a student program, I always had that background."

Mrs. Foster said that she thought this type of program would "help kids be part of the environment at school." She said she was concentrating on, "looking at moving skills outside of the classroom" and focusing on post-school outcomes for Andrew. In other words, she said that she expected Andrew to generalize and use his IEP skills beyond the actual planned activities in the classroom. These comments seem to indicate that Mrs. Foster is engaging in broader thinking about IEP skills and post school outcomes than simply addressing functional tasks.

Access to reading, writing, and mathematics curriculum. Mrs. Foster was able to figure out how she would provide access to the EALRs for her students. During our interview, she stated that she first sought ways to plan academically based activities for students who traditionally would not be exposed to reading, writing, or mathematics curriculum. A few years later, she said she started to think about writing the IEP goals with these activities in mind. Mrs. Foster wrote Andrew's IEP considering both his skills and access to academic content (see Table 12 below). The IEP instructional goal headings reflected Mrs. Foster's change in her thinking. She thought about how she could get

Andrew to "be more part of general education . . ." and which IEP skills were needed in order to provide access to academically based instruction.

Table 12. Changes in Andrew's IEP Goals over Three Years

	Functional goals	Academic Goals	Self-advocacy
Year 1	>Negotiate environment >Initiate communication	none	none
Year 2	>Communicate with pictures	>Increase independence on task	>Make choices
Year 3	>Communicate with exchange pictures >Give correct picture in 9/10 trials	>Complete 3 tasks in 4/5 trials (Read,Math) >Understand work schedule	>Demonstrate self-determination >Indicate preferences for free time activities

Mrs. Foster stated, "So whenever I started looking at a student's program, I started the same year as the (WAAS portfolio) pilot, I was always looking at trying to provide access to that . . . you know, the state standards." She described times when Andrew was working on skills in academic content areas. She noted that picture exchange communication system (PECS) cards were used to create reading opportunities for Andrew. She showed how Andrew used two PECS symbols to express choices in written language, a temporary product that could be captured in a photograph or documented using an observational checklist. Other examples of language arts activities were readily observed in the classroom and evidence was found in the portfolio.

The application of mathematics was observed in the swimming program for adaptive P.E. Andrew counted laps and marked each with a peg at the edge of the pool. Classroom observations of tasks and the portfolio provided evidence of discrimination activities of objects by shape and size. Mrs. Foster also said that she spoke with parents at conferences about providing instruction involving reading, writing, and mathematics. Her

knowledge that all students should have access to the general curriculum led her to revise Andrew's IEP to enhance functional skills, such as communication, in order to improve access to the general curriculum.

Alignment of curriculum, instruction, and assessment to academic content. Mrs. Foster, like many other teachers, demonstrated an understanding of good alignment between curriculum, instruction, and assessment in terms of teaching functional life skills. She showed how she had set up a work system for Andrew so that he would be able to perform manual tasks. Her improvement in aligning IEPs to academic content was no more evident than in the review of the last three annual IEPs (see Table 13). She listed academic headings in the current IEP even though the instructional tasks still appeared to be functional in nature. Mrs. Foster said she thought of these skills as prerequisites designed to increase student engagement in academic tasks in the future.

Table 13. Alignment of IEP Curriculum and Instruction to Academic Content Areas

IEP date	Headings	Academic Content Area Specified	Academic Instructional Tasks
12-11-02	Motor Communication	None None	
12-03-03	Communication *Academic Personal	None None None	*Increase independence on task
10-29-04	Communication *Academic **Academic Personal	None *Reading **Mathematics None	*Complete 3 tasks in 4 out of 5 trials **Understand work schedule

When I observed Andrew's class in the spring of 2005, the IEP goal to complete three tasks was evident. Andrew worked on manipulating objects in a series of three

baskets with assistance from a paraeducator. The paraeducator provided instruction and modeling for Andrew and then watched him work on each task. Assessment—direct observation of his success at a task—was immediately noted on a clipboard observation sheet. Andrew's reading entry in the portfolio targeted successfully performing three tasks in 4 out of 5 trials as the IEP skill. Teacher data sheets similar to the one observed during my visit to the classroom were included in the portfolio evidence.

While there appeared to be some evidence to show good alignment between the IEP, instruction, and assessment (both classroom and portfolio), Andrew did not appear to possess all of the prerequisite skills for accessing the reading content during classroom observations. Andrew did not appear to examine the words on the picture exchange communication cards. His tasks were manual and had few letters or words as an essential part of the task. Mrs. Foster asked that Andrew's desk be turned to face her during calendar instructional activities, but Andrew did not directly participate in reading the days of the week with the rest of the small group. Mrs. Foster moved Andrew in closer proximity to a reading group on two other occasions, which appears to indicate awareness for providing more access and alignment to reading content.

Mrs. Foster reinforced this notion of awareness for better alignment of Andrew's instruction to academic content when she talked about her plans for the next school year. She planned to provide more opportunities for Andrew to work with peers which she felt was a prerequisite skill for him to able to function in a reading group. She also spoke about the changes in the complexity of tasks she would be asking Andrew to perform in order to prepare him for academic instruction in a group of higher functioning students.

Mrs. Foster spoke about talking to parents about academic goals in fall conferences and about improving parent involvement in reinforcing IEP skills at home. She stated, "We are actually going to sit down with the IEP and altogether come up and look in reading, writing, and math - what we want to focus on." Mrs. Foster also mentioned some training she had recently attended where she learned how to adapt grade level academic units aligned with state standards and adapt the lesson plans for students with significant disabilities. She said she finally had the tools to align Andrew's activities more specifically to grade level standards, not just to the general concept of reading.

Use of assessment data to improve instructional practices and student learning. Mrs. Foster's views about closer alignment of instruction to academic content seemed to be directly related to her understanding of the portfolio assessment for the first time in 2001. Mrs. Foster said she began to rethink about her program for students with significant disabilities after implementing the portfolio assessment. Not only did she reexamine how she wrote students' IEP goals and objectives, but she changed who was making programmatic decisions using assessment data. For example, Mrs. Foster described how she gathered many service providers, such as speech and language pathologists and physical therapists, to discuss Andrew's strengths and educational needs based on the portfolio assessment data. She then used their input to design and implement his program. Mrs. Foster believes that as a result Andrew has made great progress, ". . . he is achieving his IEP skills." The movement to a collaborative planning model, changes in the IEP and program, and Andrew's achievement of IEP goals will be discussed below.

One of the ways that Mrs. Foster used assessment data was to develop the team

approach to each student's program. One example she gave was gathering all of the service providers together to discuss Andrew's program. She said they started with the question, "How could we get him to be more part of general ed. and also looking at the generalization skill—moving it (IEP skill) outside of the classroom?" The team came up with an education plan for Andrew which Mrs. Foster felt was more consistent and better utilized school service providers at the group home. For example, Mrs. Foster stated that the group home manager was taking assessment data on Andrew's skills. She also noted that because all of the service providers were on board and they had common outcomes for Andrew, it has helped her to set new goals for his IEP.

Mrs. Foster noted that she has changed the IEP to reflect her shift in thinking about IEP skills. The IEP review showed changes over a three year period from a set of goals designed solely for functional purposes to a set of skills focused on acquisition and generalization of skills to areas, such as academics, self-determination, and understanding a work schedule. Mrs. Foster said that she has expanded the communication goal so that Andrew could do more. "A lot of the activities that he does are all centered around using his communication system so that he can participate." Mrs. Foster has sought to include more opportunities for Andrew to use more complex communication skills in other settings outside the school (stated in the IEP).

Mrs. Foster attributed much of Andrew's growth to rethinking the goals and skills in Andrew's IEP. She said they are more focused "on his skills rather than just the activity. It is one thing that we have noted is his behavior has improved greatly, which in turn has helped . . . His progress toward meeting those goals has improved because it's

not this constant battle going on." Mrs. Jones at the group home agrees. "If you met Andrew in 2001 compared to now, he is totally different. In some areas he is more challenging because I think he's had move avenues opened up to him . . . He has higher expectations of us, too." Other evidence of student growth can also be gleaned from the case study data.

The progress monitoring data on Andrew's IEP over the past three years also documents his progress and achievement on increasingly more complex IEP goals and objectives in multiple settings. While Andrew's progress on his IEP skills has improved, other specific or contextual factors experienced during the implementation of the portfolio assessment may indirectly influence his program and achievement.

Influence of teacher or district conditions and actions. Two types of factors were noted during the data collection period of this study. During observations and interviews, I obtained evidence of teacher characteristics and district conditions that may have influenced the implementation of the portfolio assessment and Andrew's program. Mrs. Foster had been involved in the 2001 WAAS portfolio pilot and she had stayed involved each year in WAAS professional development activities. She appeared enthusiastic about learning new techniques for teaching to state standards at state advisory panel meetings. She stated in the interview that she appreciated having "these opportunities to talk about and dialogue with other special education teachers that were working with the same kind of student—(they) have all impacted the way I have approached his program and also the achievement . . ." Mrs. Foster is also a teacher leader in alternate assessment for the school district. She meets monthly with special education teachers implementing the

portfolio to support their programs. Mrs. Foster also shared some plans for future improvement by increasing parent involvement in the IEP and portfolio. She talked about discussing IEP skills and instruction in academic areas with parents during fall conferences. She also was planning to ask parents to participate in portfolio assessment activities throughout the year. Mrs. Foster's enthusiasm, leadership, and quest for continuous improvement may be factors to the successful implementation of the portfolio and Andrew's growth and achievement.

During the interview, Mrs. Foster also noted administrator and district support in implementing the portfolio assessment. Mrs. Foster credited her special education director with getting involved right from the start of the portfolio pilot five years ago. "We both saw where we were going and how it was going to better the students' program", stated Mrs. Foster. The administrator gave Mrs. Foster permission to serve on state advisory panels and assessment professional development teams. She said he encouraged her to set up team meetings with other service providers both in her school and district-wide. A few years ago, a district special education administrator helped Mrs. Foster to implement a two-hour early release of students one day a week to allow for team planning and data analysis. She stated that the district helped communicate the early release plan to parents and continues to support her efforts to inform parents of program improvement. The level of integration of the alternate assessment portfolio into curriculum and instruction appears to be dependent in part to the high level school district commitment as evidenced in this case study. Mrs. Foster's teacher characteristics and views of curriculum, instruction, and assessment alignment may also influence the effects

of the portfolio on educational change for programs and students.

In summary, several assertions have developed during this first case study. Data collected during interviews, classroom observations, and review of IEPs support the premise that implementation of the WAAS portfolio and professional development have played a role in influencing this teacher's program in the following ways: 1) a high level of student ownership and participation in the portfolio assessment including student evaluation; 2) high expectations in designing challenging tasks for students with significant disabilities; 3) planning for intentional access to the EALRs in academic activities and IEP goals; 4) demonstrating good alignment between the IEP, classroom instruction and assessment; and 5) the team approach for using assessment data to develop to each student's annual program. Mrs. Foster's personal characteristics for continuous learning and leadership, as well as positive support and structures from school district administrators, appear to be other important factors to consider in analyzing educational changes in this case study. Mrs. Foster is an experienced portfolio teacher for over five years and she has provided access to a rich learning environment for students in her class, including Andrew. In the next case study, the school district environment and teacher experience with the portfolio are markedly different from case study A.

Case Study B

School District B is located in central Washington and the school district serves approximately 13,100 students in grades K-12 of which 14.1 percent are receiving special education services. During the 2003-2004 school year, 980 seventh grade students

were tested including 10 students who participated in the state assessment system using the WAAS portfolio.

The case study was located in one of three middle schools serving seventh and eighth graders in the district. Students with significant disabilities were sent to their neighborhood schools so self-contained programs existed in each of the middle schools. Mrs. Brown's classroom had a set of individual desks in rows facing a blackboard in the main room with one rectangular table on the side. There were adjacent rooms for speech therapy, kitchen and laundry, and physical therapy. Mrs. Brown and two paraeducators worked with students with moderate to significant disabilities. Many students in Mrs. Brown's classroom only came for one or two periods a day and were included in general classes for the rest of the day. Four students were taught by Mrs. Brown all day.

Jennifer, a student with significant disabilities who is legally blind, submitted a WAAS portfolio last year. Jennifer is currently 14 years old, in the eighth grade, and her primary mode of communication is verbal. She often mumbles, however, and is not easily understood. She can also use picture exchange communication system (PECS) cards and has a picture schedule of her activities. Jennifer has difficulty concentrating on classroom activities and uses a tactile object (key chain or fabric loop) to focus her attention on the lesson. Mrs. Brown is Jennifer's teacher in the self-contained classroom at the middle school and was her teacher last year. Mrs. Brown has been teaching in the Life Skills classroom for students with significant disabilities for ten years and has taught preschool as well. Last year was her first year to implement the portfolio assessment following a one-day state workshop conducted in the fall of 2003. The following results of the data

analysis for this case are reported in the same categories as those in the first case study.

Jennifer's participation in the portfolio. Teacher planning and support was needed for student involvement in the portfolio. It was evident that Jennifer contributed to the portfolio evidence with the assistance of her teacher. I visited Mrs. Brown's classroom in May 2005 to conduct the teacher interview and to review the portfolio submitted last year. During the interview, Mrs. Brown confirmed that Jennifer had picked the pictures for the portfolio. Anecdotal notes included in the portfolio stated that the student had selected the pictures that were included. Mrs. Brown said that the state training workshop provided sample portfolios and many papers about the requirements. She went on to say that the portfolio was an arduous project.

Mrs. Brown spoke of consulting with another teacher in the district and copying her methods and data collection formats at first. She then thought about the portfolio requirements for demonstrating IEP skills in different setting with different people when writing the IEPs for her students. Mrs. Brown stated in the interview, "Once you start the planning and you know what you're doing, then half the work is done." The data sheets were then completed throughout the school, capturing Jennifer's performance on skills to be included in the portfolio. Mrs. Brown said the Jennifer was aware and would sometimes pose for the picture. The review of the portfolio pointed to a discrepancy between the portfolio evidence and the academic content areas that Mrs. Brown knew were to be assessed. Jennifer's performance in Mathematics may be the only entry in which there was evidence that she participated in an academically-based activity. Both reading and mathematics portfolio evidence illustrated the level and progress of

Jennifer's skills in functional tasks (Table 14).

Table 14. Jennifer's Skills by Subject Area in the Portfolio

Subject	Portfolio Skills
Reading	Complete routine tasks of 3 or more steps in 4 out of 5 times
Writing	Use a butter knife to spread peanut butter and jelly in ¾ trials with assistance
Mathematics	Count 1 to 3 objects in ¾ trials with two verbal cues

In analyzing this data regarding Jennifer's participation in the portfolio, it is evident that she demonstrated some skills that were observed and recorded as evidence of progress on IEP skills in the portfolio. Mrs. Brown stated that she was not sure if Jennifer grasped anything of the "meanings behind the portfolio." Jennifer appeared to have some ownership in the fact that she selected pictures to be included in the portfolio. Mrs. Brown did not supply the reasons for selecting these particular IEP skills to feature in the portfolio, other than to say she considered them to be readiness skills.

Teacher expectations for performance. Mrs. Brown conveys high expectations for Jennifer in attaining functional life skills. During the interview in May 2005, Mrs. Brown said the portfolio was useful because it helped her to think of other ways and places that Jennifer could practice her skills. She stated, "you try to think of not what's next but what's necessary." Mrs. Brown said she wanted her students to become independent and to have employment skills. During the parent interview conducted in May 2005, Jennifer's dad, Mr. Smith, also reinforced the idea that Jennifer's program was based on what would help Jennifer in life, like cleaning, hygiene, and cooking.

Mrs. Brown said that she teaches academic readiness skills in reading and math

every day but she stated if a student did not master a number concept by age 15, "maybe we should stop teaching her how to count to two and move on to something else." She made statements about the difficulty of having academic goals when students are significantly delayed. In Jennifer's case, Mrs. Brown stated that writing goals were particularly difficult for Jennifer because she was visually impaired. Three classroom observations confirmed that Mrs. Brown taught beginning reading skills in the context of a daily weather routine to small groups of students, with the use of picture and symbol supports.

Mrs. Brown seemed to have expectations that her student should have challenging work and should increase the level of independence in demonstrating important skills. However, Mrs. Brown stated during our interview that these goals should be oriented toward mastering functional life and employment skills. Mrs. Brown stated she would stop teaching a skill if the student had not mastered it by a certain age. She also said that Jennifer had tried learning many modes of communication and had not consistently used one throughout her schooling. This focus on functional skills and lack of consistency in communication skills may potentially affect Jennifer's ability to access academic curriculum.

Access to the reading, writing, and mathematics curriculum. One way that Mrs. Brown thought she was providing activities linked to the general curriculum for her students was to supply books to the students. Jennifer often picked a book for leisure time during my classroom observations. She thumbed through the pages independently but it was unclear whether she was actually reading anything. Mrs. Brown did not direct her to

read aloud or to explain what she had read. When reading lessons commenced, Mrs. Brown would read the days of the week on a calendar and have the students repeat after her. Jennifer repeated back what was said but she did not demonstrate any specific decoding or comprehension skills during the three observations of reading instruction in May 2005.

Mrs. Brown also engaged students in science topics. They talked about the weather and the students circled the appropriate picture on worksheets. Jennifer could form the beginning letter of her name at the top of the page and she could circle pictures with help. During my observations, tallies were marked on the sheet for the number of times she followed directions and completed tasks. No data was taken on Jennifer's understanding of weather concepts. Data collected on task completion was consistent with her IEP goals, even though it did not match the content of instruction. Table 15 summarizes the IEP goals showing little evidence of change over three years in terms of including academic skills. Although counting money may include mathematics algorithms, discriminating and matching coins is considered a functional life skill.

Table 15. Changes in Jennifer's IEP Goals over Three Years

IEP date	Functional goals	Academic goals	Self-advocacy
11-7-02	Follow a picture schedule Match pictures to people, give 4 objects Practice good hygiene Vision - to keep stimuli 12" away Communication – point to as picture Fine motor – use snaps and buttons, copy a cross, or trace letters Adaptive physical education	None	None

Table 15 continued

IEP date	Functional goals	Academic goals	Self-advocacy
10-30-03	Begin tasks and complete tasks Vision – search for object or letter Social skills Communication – use voice output to request object or answer requests Adaptive physical education	Match and sort coins Purchase items	Complete task independently
10-28-04	Follow daily schedule Complete routine 3 step tasks Complete package assembly Vision – use grid search pattern to locate activity on schedule Social skills Fine motor – washing and feeding, sort objects, match puzzle pieces	Discriminate and match coins	Communication – use voice output to make choices, request, and answer requests with more independence

Mrs. Brown initially thought about how she would write the IEP to match the scoring dimensions for the WAAS portfolio. For example, Mrs. Brown stated in the interview, "I already knew what some of the requirements were so I knew it when I was going to write the IEP." During classroom observations in May 2005, Mrs. Brown said she added language in the IEP so that Jennifer could work on being more independent as a measure of self-determination. She continued to say she got the data collections forms to use next and then thought about the Jennifer's program in terms of where she could collect the data for the portfolio. These remarks and observations of instructional activities provide evidence that Mrs. Brown was more focused on fulfilling the portfolio requirements than about meeting the expectation that all students receive access to instruction in the general curriculum areas. These challenges in providing instruction and

measuring student achievement in academic content may also be a main reason for the misalignment of curriculum, instruction and assessment observed and summarized in the next section.

Alignment of curriculum, instruction, and assessment to academic content. Mrs. Brown demonstrated minimal understanding of good alignment between curriculum, instruction, and assessment for Jennifer's program. After reviewing the IEP in force during grade 7 and the portfolio entries, I noticed that the skills selected for each portfolio entry did not match exactly to the goals or objectives in the IEP. For example, the math entry showed performance data on counting 1 to 3 objects with 2 verbal cues and the IEP in force at the time had no counting goals. In addition, the IEP did not match with instruction. During three classroom observations, Jennifer's schedule posted on her desk indicated that she participated daily in reading and math groups. No IEP headings or skills specifically mentioned reading or math. IEP skills of matching and sorting coins or making purchases may be considered math topics, even though they was listed under the heading "Increase independence, cognition, and task completion". Since no observations took place during math instruction, it is unknown if Jennifer was identifying coin amounts to make purchases or if she was asked to sort and match by attributes such as size, color, or picture. Table 16 summarizes the analysis of the curriculum skills summarized in Jennifer's annual IEP dated 10-30-03 and the IEP skills Mrs. Brown listed in the 2004 portfolio. There appears to be limited alignment between skills Mrs. Brown listed in the portfolio and those in the IEP. The link to academic content is missing in all entries.

Table 16. Alignment of Jennifer's IEP Curriculum to Portfolio Assessment

	Portfolio skills	Nearest IEP Skill	IEP Headings
Reading	Complete routine tasks of 3 or more steps 4 of 5 times (with no more than 3 reminders)	Complete tasks with 3 or more steps 80% of the time	Increase independence, cognition, and task completion
Writing	Use a butter knife to spread peanut butter and jelly in 3 of 4 trials with assistance	No match	No match
Mathematics	Count 1 to 3 objects in 3 of 4 trials with two verbal cues	No match	No match

Mrs. Brown's views of the appropriate life skills curriculum for Jennifer may limit the effects of the portfolio on educational change. Mrs. Brown focused her instructional goals solely on functional skills. In addition, Mrs. Brown's instruction was sometimes academically-based where the majority of the skills listed in the IEPs and the portfolio were not. The misalignment between what is taught and assessed in the classroom, what is indicated as curriculum in the IEP, and the targeted skills listed in the WAAS portfolio may further restrict Jennifer's access to academic content and instruction. The information collected and analyzed on teacher use of portfolio results to improve instruction and student learning is summarized in the next section.

Use of assessment data to improve instructional practices and student learning. Mrs. Brown used WAAS portfolio data only as a reflection that she had met all of the required components. During our interview, she knew that the high scores for generalizing the IEP skills meant that she had provided enough data about incorporating more choices or demonstrating the skills in different settings. She also noted that she thought Jennifer was more consistent in showing what she could do since implementing

the portfolio. Mr. Harris, Jennifer's father, stated that she had grown a lot in the last two years. He was very proud that Jennifer was on the principal's honor roll this year. He attributed her progress to the hardworking staff at the school, especially Mrs. Brown. Mrs. Brown said she thought that Jennifer could learn more if the district would do more.

Influence of teacher characteristics or district conditions and actions. The use of alternate assessment in implementing curriculum and instructional changes seems not to have occurred in this case due in part to lack of district commitment. Although she had assistance from an experienced portfolio teacher in putting together the portfolio, Mrs. Brown stated in the interview and during classroom visits that she was worried about missing something important to teach to her students. Mrs. Brown felt there was not a lot of district leadership in setting a consistent set of skills for students with severe disabilities like she had seen back east. She said there was also no coordination between what teachers taught between schools or across a student's educational career. For example, she noticed that an elementary teacher may teach a child sign language as a way to communicate and the next teacher could start over with a different communication system, such as "Writing With Symbols". Mrs. Brown said she designed Jennifer's program in her head and she would welcome "any kind of assistance that would give us guidelines and benchmarks."

Mr. Harris also noted barriers to Jennifer's progress and achievement during our interview in May of 2005. He felt that Mrs. Brown had "her hands tied by state guidelines." He further explained that Jennifer needed additional one-on-one related services, such as speech and vision therapy, which could not be provided because she did

not meet state criteria. He felt that all students in the classroom could make more progress if they adjusted the staff to provide "more special needs therapy" to improve life skills. His focus on functional skills as well as the perceived lack of adequate progress may also be dependent on the level of school district commitment to implementing the WAAS portfolio as part of a overall school reform agenda to improve student academic performance. Both teacher and parent saw little need for focus on academic instruction. Mrs. Brown appeared to have unclear directives and limited support from the school district and state which may have contributed to a less than optimal program and fewer educational opportunities designed for Jennifer to reach her full potential in academic content.

To summarize the claims made in this case study, the collected evidence indicate that implementation of the WAAS portfolio has influenced Mrs. Brown's educational program in the following ways: 1) encouraging student participation in selecting pictures for the WAAS portfolio; 2) building expectations for students with significant disabilities to increase self-determination and independence; 3) providing opportunities to practice IEP skills in other settings; 4) increasing awareness of alignment issues between the IEP, classroom instruction and assessment content; and 5) using the WAAS portfolio results for monitoring Jennifer's consistency in demonstrating her skills. While the portfolio assessment may have provided a reason to change IEPs and instruction to improve student learning, Mrs. Brown did not appear to implement the portfolio assessment as a measure of academic skills.

The final case study contained in this report will describe a school district

program in which the teacher has four years of portfolio implementation experience as well as one year as a scorer of WAAS portfolios. The evidence collected in this third school setting will be summarized and reported similarly to the previously reported case studies.

Case Study C

Our third school district is located in a densely populated region of western Washington. The school district serves approximately 7,900 students in grades K-12 of which 9.3 percent are receiving special education services. During the 2003-2004 school year, 590 seventh grade students were tested including 3 students who participated on the WAAS portfolio assessment.

The middle school for the student selected for the case study is one of two grade 6-8 buildings in the district. Both schools have self-contained programs for students with moderate disabilities, but this middle school is home to a classroom with four students with significant disabilities. There are four staff members including a teacher, a nurse, and two paraeducators in the large classroom. The room has a kitchen and laundry area and contains round tables and computer stations for teaching and learning activities. A large portion of the instruction and therapy is delivered one-on-one to each student.

One of these students, Charles, a student with multiple disabilities, submitted a WAAS portfolio in 2005. Charles is a 15-year-old eighth grader with no ability to walk and has limited control of his body. He is nonverbal and communicates using switches, eye gaze, and facial expressions. Charles uses hand switches to trigger an auditory

recording when pressed, such as "yes" and "no." The dual head switches are mounted on Charles' wheelchair and he can trigger an action on a computer program or turn on a motorized toy by leaning his head to the right or left. Charles' mother, Mrs. Thomas, says that Charles feels a lot of frustration but won't quit because he wants to have more independence.

Mrs. Martin is Charles' teacher in the self-contained classroom for students with the most significant disabilities. She has been working with Charles for the past two years. Mrs. Martin has been teaching students with disabilities for 25 years, 18 of those years spent working with students with significant disabilities, and has also served as a paraeducator for three years. Last year was her fourth year implementing the portfolio assessments for her students. In addition to attending training at state workshops, Mrs. Martin participated in the 2004 WAAS Portfolio Scoring Institute where she reviewed and scored over 50 portfolios during one week of intensive work. The following results of the data collected for this case are summarized and reported below using a similar set of headings as those developed for the other case studies.

Charles's participation in the portfolio. Mrs. Martin provided the support necessary for Charles to provide input on selecting evidence and constructing the portfolio. I conducted a teacher interview in May 2005 with Mrs. Martin and reviewed the portfolio submitted last year. She provided detailed information about her planning process for the portfolio starting each September. She first looked at IEP skills and the EALRs in the content areas assessed. Mrs. Martin then picked the skills from Charles' IEP and wrote down "possibilities of what that skill looks like" in different settings.

Table 17 summarizes the IEP skills featured in Charles' seventh grade portfolio. There appears to be no direct link to academics in the skills Mrs. Martin listed in the portfolio.

Table 17. Charles' Skills by Subject Area in the Portfolio

Subject	Portfolio Skills
Reading	Touch picture when prompted with 80% accuracy
Writing	Grasp utensils with minimal assistance in under 60 seconds
Mathematics	Decrease time to take and grasp object from 2 minutes to under 60 seconds

Mrs. Martin also shared how she showed Charles a chart of data showing progress on his own IEP skills. She explained that he picked the color to fill in the bar graph of that data and then she guided his hand to fill in the chart. During the interview, Mrs. Martin confirmed that Charles had picked digital pictures for the portfolio using eye gaze to indicate his choice. She acknowledged that he enjoyed the whole process for "putting the pages together." The annotations noted in the portfolio clearly outlined Charles' involvement in completing the bar graph and selecting the photographs. This planning process and efforts to include Charles in constructing the portfolio may indicate one way that Mrs. Martin holds high expectations for learning.

Teacher expectations for performance. Mrs. Martin planned for collecting data of achievement and improvement on IEP skills from the first day of each school year. During our interview, she explained that she checks in September to see how each IEP skill fits with the EALR Extensions as well as where the skill may be used around the school and in the community. Mrs. Martin stated that she looks for Charles' progress continuously and that she may drop a skill for a period of time or work on it in different

ways if he is not making progress. For Charles, she noted, "communication is key." She told me about increasing the ways that Charles could communicate, such as gazing at one of two pictures, grasping an object, or hitting a head switch to the right or left to indicate a choice. During classroom observations, it was apparent that Mrs. Martin has acquired many assistive technology devices and computer programs to help Charles to develop his communication skills. Mrs. Martin said that she doesn't always know what he understands but that she would talk with him and keep giving him lots of choices using different modes of communication. Thus, Mrs. Martin understood that holding high expectations for Charles is predicated on developing viable ways for him to communicate what he is learning. Learning is also dependent on what content is taught.

Access to the reading, writing, and mathematics curriculum. Mrs. Martin understands the concept of providing greater access to the general curriculum for her students but her instructional practice is not well developed in presenting academic content and appears to be focused on prerequisite access skills. During the document review of Charles' three most recent IEPs, the skills were related to increasing motor skills, rather than using motor skills to communicate, and none were focused on reading, writing, or mathematics skills. No goals were written to build self-advocacy or increase independence. Table 18 summarizes the IEP goals and objectives all of which were listed under the heading of Occupational and Physical Therapy goals. There does not seem to be any clear links to reading, writing, or mathematics in Charles' IEPs over the past three years.

Table 18. Changes in Charles' IEP Goals over Three Years

IEP date	Occupational and Physical Therapy goals	Academic goals	Self-advocacy
12-13-03	Use a single switch in 4/5 trials Choose objects from a field of 2 in 4/5 trials Grasp art, calendar, pictures in 4/5 trials Use one head switch in 8/10 trials Reach and pick up object in 2/3 opportunities	none	none
1-15-04	Pick from 3 choices in 4/5 trials Activate dual head switches in 4/5 trials Use eye gaze or touch in 4/5 trials Grasp and release in 4/5 trials	none	none
1-7-05	Pick from 3 choices in 8/10 opportunities Select correct match from a field of 3 with 80% accuracy Activate head switch with 60% accuracy Grasp objects in band and PE 80% of the time	none	none

During classroom observations, Mrs. Martin used a number of instructional strategies to engage the students in learning. For example, she presented a math lesson to a small group in a game format using number cards using yes-no auditory hand switches so Charles could respond. The game involved students playing a number card in their hands, following the directions on the cards, and selecting the next person to play. Mrs. Martin directed the activity and she held the cards for Charles. While he was attentive and held his head up during the game, it was unclear if Charles was recognizing numbers or merely following directions.

In another observation during the reading period, Mrs. Martin utilized computer program so Charles could look and listen to a story while turning pages using his head switch. Mrs. Thomas, Charles' mother, commented that she would read books to him at home because they did not have a computer. Other computer programs at school required

Charles to select and match words and phrases using his head switches. The text was accompanied by pictures and sound and it was unclear what Charles used to discriminate and make his choice for the matching exercise. In the interview, Mrs. Martin had difficulty in talking directly about academic skills. She said that she thought about reading, writing, and math as a way "to think outside the box - to think about choices for something." After some probing, she stated that Charles could recognize his name now with 80% accuracy and she was thinking about other words, such as animal names, to teach him. Pictures in the portfolio depicted closer alignment to academic content than the targeted IEP skills listed by Mrs. Martin on the entry cover pages. While she may hope to provide greater access to academic curriculum, Mrs. Martin appeared to focus on Charles demonstrating motor and communication skills during instructional activities. This conflicting data also points to an apparent mismatch between curriculum, instruction, and the alternate assessment which will be summarized in the following section.

Alignment of curriculum, instruction, and assessment to academic content. Mrs. Martin's views of aligning the WAAS portfolio to curriculum and instruction may limit the effects of the alternate assessment to raise the bar for higher student achievement in academic areas. During our interview in May 2005, Mrs. Martin said aligning his curriculum (IEP goals) to help Charles to participate in reading, writing, and mathematics was a challenge. She talked about planning the instruction by looking at different places Charles could demonstrate IEP skills and increasing the number of choices he could make throughout the year which are both components of the WAAS scoring rubric. The

IEPs, however, do not refer to goals in academic content or self-advocacy, elements scored on the portfolio. She drew the following analogy to participation in art classes, "He can't make the same products as everyone else but he can use the same medium." This view seems to indicate that she plans for Charles to participate in similar academic activities as other students while having different goals and outcomes in mind.

Mrs. Martin does, however, exhibit some consistency and alignment in the skills documented in the IEP, classroom instruction, and the data collection charts included in the portfolio. She selected IEP skills for the portfolio that generally matched those found in the IEP for last year and those skills observed in the classroom one year later. Table 19 provides a comparison of these skills to the IEP dated 11-15-04 which was in force at the time the portfolio was developed.

Table 19. Alignment of Charles' IEP Curriculum to Portfolio Assessment

	Portfolio skills	Nearest IEP Skills	Classroom Observations
Reading	Touch picture when prompted with 80% accuracy	Pick from 3 choices in 4/5 trials Activate dual head switches in 4/5 trials	Computer – selecting pictures & shapes from fields of 2, 3, or 6
Writing	Grasp utensils with minimal assistance in under 60 seconds	Grasp and release in 4/5 trials	Fine motor and sensory exploration – grasping semi-liquid substances
Mathematics	Decrease time to take and grasp object from 2 minutes to under 60 seconds	Use eye gaze or touch in 4/5 trials Grasp and release in 4/5 trials	Math – card game, touching card to play and choosing next player using yes-no hand switches

While Mrs. Martin demonstrated awareness of aligning instruction and portfolio

skills to those included in the IEP, she did not align instruction to academic content goals or identify the link from skills to academics in the IEP. Although many of the skills listed in the IEP were general enough to be used in both functional and academic activities, no mention of reading, writing, or mathematics is included in the IEP or appeared to the target of instruction during classroom observations. During the interview, Mrs. Martin mentioned that she gave Charles opportunities for choice making (which aligns to the self-determination dimension of the portfolio rubric) but she did not write IEP goals for increasing self-advocacy skills or choice making. This weak alignment of the IEP and instruction to academic areas limits the potential influence and use of portfolio results to improve student learning in academic content. The evidence gathered in this case study regarding the use of alternate assessment data to inform instruction and to improve student achievement will be discussed next.

Use of assessment data to improve instructional practices and student learning. Mrs. Martin used assessment data and portfolio evidence to provide information to generally improve her program. During our interview in May 2006, Mrs. Martin said that once she knew what she was doing on the portfolio, the required elements made her look at IEP skills not in isolation but in terms of how Charles could generalize and use these skills in other settings and in more meaningful ways. She stated that implementing the portfolio also helped her "to focus on self-determination and choice making." Mrs. Martin explained how she shared the same pictures (from the portfolio) with general education teachers at a teacher meeting to show examples of student engagement in educational activities. She summarized that overall "the portfolio is a reflection of his

progress."

Mrs. Martin also credits the portfolio with helping to increase Charles' success as a learner. She stated that she "changed the way she looked at student achievement." She said planning for the portfolio provided more opportunities for Charles to demonstrate his skills more often, in different locations, and to a higher degree of proficiency. She stated that she now gives Charles more opportunities using Intellikeys software to make choices in everything he does. Mrs. Thomas also gave examples of how Charles has progressed at home. She stated that he was much calmer at home and he seemed to enjoy story time more now than previously when he had yelled at her. While Mrs. Martin attributes much of Charles progress on her understanding and implementation of the portfolio process, alternate assessment results do not appear to directly influence changes in the IEP skills or the overall program toward academic learning for Charles. Other factors may also have had an influence on Charles' progress and achievement and are summarized below.

Influence of teacher or district conditions and actions. Both teacher characteristics and district factors may have indirectly influenced Charles' educational program in this case. Mrs. Martin admitted that she didn't know what she was doing during the first year of implementing the portfolio. After four years of the portfolio, she feels she has integrated the alternate assessment process into lesson planning. During portfolio scoring, she said she got many ideas for ways to document progress and provide different settings and opportunities for students to use their IEP skills. Her experiences with the portfolio and as a scorer appear to be positive factors for influencing Charles' growth.

Her efforts to learn more about the portfolio were also supported by the school

district. The school district expected Mrs. Martin to participate in district professional development activities, such as documenting levels of student engagement and reviewing assessment data on the WAAS portfolio annually. The district also released her to attend state portfolio training sessions each year. Mrs. Martin also showed me the digital camera that the district had purchased so she could get more immediate evidence of student performances for the portfolio. These district actions of holding teachers accountable, providing professional development, and providing portfolio data collection tools were generally supportive of the overall mission of documenting and improving student learning for Charles and the other students with significant disabilities in the school district.

Other factors were noted, such as a high rate of turnover in nursing staff and a parental concern regarding limited physical therapy to strengthen neck muscles, but both Mrs. Martin and Mrs. Thomas seemed pleased with Charles' growth. The integration of the portfolio into the curriculum and instruction and Charles' achievement appear to depend primarily on Mrs. Martin rather than as a result of the influence of district actions in this case.

In summary, evidence collected during interviews, classroom observations, and archival reviews of IEPs in this case have focused on the possible effects of the WAAS portfolio on educational changes in the classroom. A number of statements have been made to support the premise that the alternate assessment has played a part in influencing Mrs. Martin's program as follows: 1) providing support for student participation in constructing the portfolio including monitoring progress on skills; 2) planning from the

first day of each school year for integrating the portfolio and instructional activities on IEP skills; 3) holding high expectations by developing viable ways for students to communicate what is learned; 4) focusing instruction on expanding basic access skills to different settings and making choices; 5) aligning instructional targets and portfolio skills to those included in the IEP with an indirect link to academic content through access skills found in the EALR Extensions; and 6) using assessment results as a measure of student progress. The use of alternate assessment in implementing curriculum and instructional changes seems attributable mostly to Mrs. Martin's efforts and portfolio experience rather than due to district support.

From the findings noted within each case study, further examination of the results is warranted to identify findings and discrepancies regarding educational change across cases. A cross case analysis based on the assertions developed from these three school district cases is summarized and discussed next. The cross case findings are followed by a general discussion of the overall results from both phases of this research study.

Cross-Case Analysis

The purpose of this cross case analysis is to identify possible relationships between teachers' response to alternate assessment, their characteristics (e.g., experience with the portfolio), changes in their teaching and their student's learning, and the context in which they worked. Each of the three teachers varied in the extent of their experience with the WAAS portfolio assessment. A set of assertions were developed for each case after analysis of the data that was collected through interviews, observations, and review

of IEPs in the spring of 2005. These assertions were analyzed across cases, first by examining the contrasting cases for the teachers with the least and the most portfolio experience. Then the claims made in the third case were compared with the first two. The cases were also analyzed in terms of the district context and level of support in the area of alternate assessment.

Mrs. Foster in case study A had the greatest amount of portfolio experience. She participated in the state WAAS portfolio pilot in the spring of 2000 and she was a member of the state advisory panel since that time. She also became involved as a state assessment trainer for the Special Education Assessment Leadership Team since its inception in 2003. Mrs. Brown, on the other hand, had initiated her first portfolio last year and had attended one state WAAS training session. Table 20 summarizes a comparison of the assertions made about educational changes in each of these cases as well as a description of the school district context for each of these teachers.

Table 20. Comparison of Assertions and Contexts for Case Study A and B

	Case study A – Mrs. Foster	Case study B – Mrs. Brown
Student participation in portfolio	High level of student ownership and participation in the WAAS portfolio including student evaluation of skills	Encouraging student participation in selecting pictures for the WAAS portfolio
Teacher expectations	High expectations in designing challenging tasks for students with significant disabilities	Building expectations for students with significant disabilities to increase self-determination and independence
Access to academic content	Planning for intentional access to the EALRs in academic activities and IEP goals	Providing opportunities to practice functional non-academic IEP skills in other settings

Table 20 continued

	Case study A – Mrs. Foster	Case study B – Mrs. Brown
Alignment of curriculum, instruction, and portfolio	Demonstrating good alignment between the IEP, classroom instruction and portfolio academic content	Increasing awareness of alignment issues between the IEP, classroom instruction and portfolio academic content
Using assessment data to improve instruction	Using a team approach for using assessment data to develop to each student's annual IEP and program	Using the WAAS portfolio results for monitoring the student's consistency in demonstrating skills
District context and support	Release for WAAS training and scoring Ongoing leadership in WAAS professional development Early release of students every week for team planning	Release for WAAS training

As a first finding, experience with the portfolio appears to help the teacher integrate alternate assessment activities more frequently into daily routines for both students and himself or herself. Mrs. Brown seemed to have similar expectations to Mrs. Foster that her student should have challenging work and should increase the level of independence in demonstrating important skills. The first noticeable difference between Mrs. Foster and Mrs. Brown is the level of integration of assessment into instructional activities. While Mrs. Brown struggled with selecting the IEP skills, linking the skills to academic content, and spending numerous hours choosing the evidence for each portfolio entry, Mrs. Foster had figured out how to build weekly assessment data collection routines and involved Andrew regularly in monitoring progress and selecting portfolio evidence for each content area. The fact that Mrs. Brown had no prior experience with the WAAS portfolio may account for these discrepancies.

A second finding in this area is that teacher understanding of academic curriculum and instruction alignment to alternate assessment may influence the content of what is taught. The notable difference was found in reference to academic content in the IEPs and portfolios. Mrs. Foster had reading and mathematics headings in the IEP and portfolio evidence included data taken on counting numbers. Mrs. Foster appeared in her interview to be engaged in thinking about teaching a broader range of academic and functional skills and documenting instruction of academic content while Mrs. Brown emphasized the use of functional tasks and skills in both the IEP and the WAAS portfolio.

Third, student expectations and instruction in academic content may be directed by the teacher's philosophy of what should be taught. Mrs. Foster stated that she expected Andrew to learn academic skills and that she would teach whatever prerequisite skills were needed in order for him to learn more, where Mrs. Brown stated she would stop teaching a skill if the student had not mastered it by a certain age. Andrew's guardian, Mrs. Jones, identified and reinforced his IEP skills and was aware of the academic content of the WAAS portfolio, where Jennifer's father was not familiar with the portfolio that Mrs. Brown constructed and he reinforced Mrs. Brown's premise that more functional IEP skills should be taught.

Finally, the fourth factor that seemed to influence the impact of the portfolio on educational change in these two case studies was the level and type of district commitment and support. Mrs. Foster was encouraged by the district assistant special education director to participate in the portfolio pilot and to volunteer for state advisory

panels and leadership groups. They supported her in providing portfolio workshops to special education teachers across the district and worked with community and transportation department to send the students home two hours early every Wednesday so that Mrs. Foster could review assessment data and plan instructional strategies with service providers for each of the students in her class. Mrs. Brown, in contrast, planned her first portfolio with one other teacher who had done it before. Mrs. Brown commented that there was no vertical curricular alignment between grades or horizontal alignment across schools in determining what would be taught and no district scope and sequence for academic instruction for her students. The differences in school district direction and support for implementing the WAAS portfolio appears to affect the level of alignment and integration of assessment into instruction as well as satisfaction with student programs.

The assertions for case study A were also compared to those for case study C. Both Mrs. Foster and Mrs. Martin had at least four years of portfolio experience and both had been scorers at the state portfolio scoring institute. In addition, Mrs. Foster had been trained and served as a scoring table leader for several years and had provided input in shaping the direction of the alternate assessment as a member of the state Special Education Advisory Panel. She had conducted numerous portfolio training workshops for special education colleagues and she facilitated district-wide meetings on implementing the alternate assessment. Table 21 summarizes the assertions made in both Mrs. Foster's and Mrs. Martin's cases. The cross analysis of all these cases follows in light of the findings for Case A as compared to Case B.

Table 21. Comparison of Assertions and Contexts for Case Study A and C

	Case study A – Mrs. Foster	Case study C – Mrs. Martin
Student participation in portfolio	High level of student ownership and participation in the WAAS portfolio including student evaluation of skills	Providing support for student participation in constructing the portfolio including monitoring progress on skills
Teacher expectations	High expectations in designing challenging tasks for students with significant disabilities	Developing viable ways for students to communicate what is learned
Access to academic content	Planning for intentional access to the EALRs in academic activities and IEP goals	Focusing instruction on expanding basic access skills to different settings and making choices
Alignment of curriculum, instruction, and portfolio	Demonstrating good alignment between the IEP, classroom instruction and portfolio academic content	Aligning instructional targets and portfolio skills to those included in the IEP but with an indirect link to academic content via access skills
Using assessment data to improve instruction	Using a team approach for using assessment data to develop to each student's annual IEP and program	Using assessment results as a measure of student progress
District context and support	Release for WAAS training and scoring Ongoing leadership in WAAS professional development Early release of students every week for team planning	Release for WAAS training and scoring District professional development for teaching Support in capturing digital pictures of performance

The first finding in the earlier cross case analysis seems to be supported for these two cases in that both experienced WAAS teachers integrated alternate assessment activities into daily routines. Both Mrs. Foster and Mrs. Martin involved their students to a high degree in program and portfolio activities. They were both concerned about engaging their students in the challenging educational activities and had planned embedded routines for gathering assessment data. They also created opportunities for

each student to monitor or evaluate their own progress on the skills they were learning, unlike Mrs. Brown in case study B. Both Andrew and Charles helped to construct their portfolios where Jennifer only selected the pictures that were included in the WAAS binder. The student's involvement in both instructional and assessment activities conveys the level of teacher planning and integration of assessment into the educational program.

A second finding in this area is that the strength of linkages to academic curriculum as determined by the teacher, as well as understanding of alignment between curriculum and instruction, may influence the content of what is taught. Both Mrs. Foster and Mrs. Martin understood the importance of developing effective modes of communication as a tool to continually building higher expectations. While Andrew used the Picture Exchange Communication System cards and Charles activated his head and hand switches, each type of communication system was consistently found in the portfolio evidence as well as in the classroom during instruction. Both teachers described ways to teach academic content during their interviews and classroom observations, yet Mrs. Foster was the only teacher to explicitly talk about her goal of teaching vocabulary and counting numbers to Andrew. Mrs. Martin spoke of the EALR Extension access skills (such as following directions or making choices) as a sufficient bridge to reading and mathematics instruction. Mrs. Brown spoke of increasing Jennifer's independence in following directions and acquiring skills for living but did not directly address instruction or improvement in teaching reading, writing, or mathematics.

Third, student instruction in academic content may also be directed by teacher philosophy of what should be taught. Mrs. Foster spoke about instruction in academic

areas for Andrew and had included academic language in the IEP. She provided opportunities for Andrew to participate in reading and math activities and collected assessment data on Andrew's progress on academic skills, such as counting and letter matching. Mrs. Martin wrote IEP goals that could be used for either functional or academic purposes in the IEP but focused instruction and assessment data collection on prerequisite communication and motor skills with Charles as a link to academic content. She said that once she understood the link to academic content through access skills, then the challenge of teaching reading and mathematics decreased. Mrs. Brown wrote some functional goals as well as goals for following directions and task completion in Jennifer's IEP. She provided instruction in academic content but did not evaluate Jennifer's skills in these areas for the portfolio. Only Mrs. Foster seemed to use assessment data on academic skills during team planning time as a way to improve the program for her students.

Lastly, this cross case analysis further reinforces the idea that integration and use of assessment information to systemically improve education programs and student learning may be dependent, in part, on school district factors and support. While the teachers in all three cases said they were planning their programs differently following implementation of the WAAS portfolio, other school district factors appeared to influence what they did. Both Mrs. Foster and Mrs. Martin were supported in attending numerous professional development training sessions. The school district administrators in case study A provided a strategic plan to the community about improving learning for all students, including those in Mrs. Foster's classroom. Mrs. Foster also received

significant support in setting up district schedules and structures in order to implement the weekly team planning model. Mrs. Brown, in contrast, had little apparent support in implementing the portfolio assessment and was on her own to figure out how it fit in with the curriculum she created. These district actions influenced to some extent each teacher's ability to implement instructional changes for program improvement.

Several steps were taken during the cross case analysis to minimize potential researcher biases and to confirm the overall findings. First, physical evidence as well as assertions were reexamined in light of the research questions. Using triangulation of data from three collection methods, the data was analyzed for agreement or discrepancies. Incidental evidence from the actual student portfolios was utilized, although this review was not part of the original research design. In addition, I reflected on my own role and goals as the state program supervisor for the portfolio program. I refocused on the original research questions, rather than the program design and purpose or personal assumptions, to provide a balanced approach to thinking about the assertions that were stated.

Summary of Findings

This study provides evidence that teacher portfolio experience, professional development, and district factors can make a difference in the level and kind of educational change experienced by students who participate in alternate assessments. A summary analysis of the survey findings from phase one and the case study findings will be discussed below.

In phase one of this study, existing survey data was analyzed to first focus on teacher opinions about change and reasons for changes in student access to and participation in instruction in reading, writing, and mathematics. Approximately half of the teachers surveyed perceived a change in access to the general curriculum and participation in standards-based activities and most often gave professional development and participation in WAAS as the general reasons. In examining disaggregated survey results, the data suggests that teachers new to the portfolio often perceived less change and, for those who indicated a change, selected different reasons for change than experienced portfolio teachers. Teachers with greater portfolio experience selected WAAS as the reason for change more often than their less experienced colleagues. In addition, both new and experienced portfolio users indicated professional development and district reasons for change Differences in perceived changes and reasons for changes in student learning among teacher subgroups and the limitations of survey responses to adequately describe various changes within individual schools indicate the need for deeper inquiry of teachers and parents regarding changes in educational programs and in student generalization of skills and achievement of IEP goals for phase two. These findings provided a perspective for conducting the case study phase of the research.

In phase two, several findings have arisen from the three case studies involving student observations, teacher and parent interviews and review of IEPs and portfolios. These findings are based on inquiry into four areas of educational change for teachers and students participating in the WAAS portfolio and are summarized below. As a first finding, experienced portfolio teachers appear to integrate alternate assessment activities

into daily routines for both students and themselves. A second finding in this area is that teacher understanding and use of curriculum linkages to academic content and instruction alignment to alternate assessment may influence the content of what is taught. Third, student instruction in academic content may also be directed by the teacher's philosophy of what should be taught. Lastly, the level and type of district commitment and support, including opportunities for professional development, may influence the impact of the portfolio on educational changes in these case studies.

The results from this study may be used to generate a broader meaning for policy directions and to inform educational practice and ensuing research. The next chapter provides a summary of possible conclusions and implications that may be drawn in light of these findings. Limitations for interpretation of the findings will also be discussed as well as recommendations for future research and leadership actions.

CHAPTER 5

Conclusions and Implications

The purpose of this chapter is to draw conclusions about the possible impacts of implementing the alternate assessment portfolio in Washington. The intent of this research was not to prescribe what every special education teacher should do when implementing the WAAS portfolio, but rather to inform state and school district policy and practice based on an exploration of how three teachers implemented the alternate assessment in order to promote high student achievement. In this chapter, I first discuss the findings using the original research questions regarding the impacts of implementing the alternate assessment for students with significant disabilities. Next, I interpret the overall meaning of these findings in terms of the assessment theory of action for educational leaders. Following a discussion of the limitations of this study, the findings, understood within a framework of leadership action, suggest several implications for future leadership actions and research.

Discussion of Findings

Qualitative research in special education has provided important information that can be used to inform policy and practice (Brantlinger et al., 2005). In this spirit, this research study was designed to inform policy and practice by examining the contexts and experiences of three teachers implementing the alternate assessment portfolio in Washington. The case studies probed patterns apparent in the secondary analysis of 2003

survey data collected by the state from practicing teachers engaged in portfolio assessment of students with significant disabilities. I summarize below the primary findings that emerged, first from the survey analysis, and second, from the case study analyses.

The survey analyses in phase one focused on two research questions. The first question investigated teacher perceptions regarding educational changes and reasons for changes in student access to instruction in reading, writing, and mathematics during participation in WAAS, and the reasons for these changes. The analysis suggested the following: *experienced portfolio teachers may be more likely than new portfolio teachers to view the alternate assessment process as leading to changes in access to the general curriculum for their students*. This may mean that more experienced teachers can actually visualize – and may even have taken steps – to use the WAAS portfolio process to bring about these changes.

The second research question, concerning changes in student programs or achievement in the general curriculum, guided further disaggregation of survey data. A second finding, related to the first, emerges: *teachers with more portfolio experience may be more likely than their less experienced colleagues, to view the alternate assessment process as leading to changes in instructional programs and student achievement of IEP skills.*

The survey analysis also yielded one further set of insights, concerning possible influences on perceived changes in access, program or performance. Here, certain kinds of factors, notably professional development and school district requirements, may be

important influences on the educational changes and student learning that take place during and as a result of WAAS participation.

These results provided a starting point for the case study phase of the research. In this phase, four research questions pursued the following: (1) teachers' implementation of the alternate assessment portfolio; (2) programmatic changes experienced by students following implementation of the assessment; (3) changes in student achievement (reaching goals of IEP skills linked to state standards, for example); and (4) the range of actors and policies that might be influencing these changes in program or performance.

First, regarding specific steps taken by three teachers to implement the portfolio for one specific student in their classrooms, teacher interviews and observations appear to confirm that *experience with the portfolio appears to help the teacher to integrate alternate assessment activities into daily routines*. While all three teachers seemed to understand the portfolio elements and followed the assessment procedures for assembling the portfolio binders, the inexperienced portfolio teacher did not involve her student in the assessment beyond choosing pictures for the binder. In contrast, the two experienced portfolio teachers integrated alternate assessment activities into classroom routines for both students and themselves.

Second, regarding programmatic changes students had experienced in access to state academic content standards following implementation of this alternate assessment, all three teachers stated that they changed the way they wrote the IEPs following portfolio training and implementation. While these changes seemed to raise expectations for student learning, they were not necessarily related to providing greater access to

academic content. One student was provided a greater number of settings in which to practice functional skills with more independence and another student's program was adjusted to focus on using communication skills to make choices. Here the case study data support a second finding: *regardless of experience with portfolio assessment, the teachers may not understand how to provide instruction in academic content for students with significant disabilities.* In other words, the portfolio experience, by itself, did not necessarily show these teachers what they could do to enrich the academic dimensions of their students' environments.

Related to this pattern, the case study data demonstrate a mismatch between the alternate assessment evidence, IEP goals, and classroom instruction and assessment. In one case, the teacher based the portfolio entries for reading and mathematics on the functional curriculum that was taught and tested in the classroom. In another case, the teacher felt that alignment of the portfolio evidence to academic content was achieved through linkages to the EALR Extension access skills, even if linked to communication, motor, or social domains. This raises two other possibilities: first, teacher knowledge and use of curricular linkages to academic content and instructional alignment to either state or classroom assessment may influence the content of what is taught and, second, teacher philosophy of what should be taught may influence the content of what is taught. Thus, a third finding is developed: *how teachers viewed the connections between evidence in the portfolio entries and the teaching and learning going on in the classroom may influence whether the teacher will make any changes in providing greater access to the general curriculum.*

Fourth, concerning any changes in the students' achievement of IEP skills linked to state standards, the students in all three cases appeared to be making progress on IEP skills, and parents and teachers agreed that gains had occurred. Only one student was working directly on basic literacy and numeric skills, however, and classroom data confirmed his progress on these skills. The other two teachers delivered academically-based lessons but did not collect data on student understanding of reading or mathematics skills, but rather documented IEP skills, such as following directions or task completion. Since the IEP goals were not aligned to academic content and academic skill data was not collected in two cases, it is difficult to discuss impacts of alternate assessment on academic achievement for these students. It may also be hard for teachers to demonstrate to themselves, or others, that students are really understanding academic knowledge or skills due, in part, to student limitations in communicating what they have learned. Thus, a fourth finding is set forth: *student achievement toward meeting state standards in academic content may depend on viable communication systems and methods for collecting data about student learning in academic content.*

Teachers in these cases also seemed to vary in their understanding of the uses of assessment data to improve learning. All three teachers used assessment data to monitor progress on IEP goals, but only the most experienced portfolio teacher used alternate assessment data to inform instruction and to improve the student's program services to include support for reading and math goals. This leads to a fifth finding: *teacher use of alternate assessment and WAAS performance data may determine, in part, the level of instructional and programmatic changes focused on increasing student academic*

learning.

The final research question for the case studies focused on discerning factors, including the implementation of alternate assessments, which may account for any program or student performance changes. Some changes may be attributable to individual student characteristics and conditions in these cases. All three teachers mentioned physical changes in their middle school students had played a part in their learning. Parents in two cases suggested that more services, such as physical therapy and vision services, were needed in order for their children to make better progress. In all three cases, the teachers also mentioned that the students' success in using communication modes was an important key to assessing learning. Although these factors should be considered in planning instructional programs for students with significant disabilities, they are due to biological maturation and individual needs which do not shed light on the leadership challenges that were addressed in this study.

Other factors, however, are especially pertinent to the policy and leadership problems posed by alternate assessment of students with significant disabilities. The level and type of district commitment and support also seemed to influence the impact of the portfolio on educational changes in these case studies. In one case, the district was involved in the development of the WAAS portfolio assessment for the state and integrated the alternate assessment results with all student performances. School district support and structures facilitated weekly planning for program improvement for all students with significant disabilities, as well as developing a plan for greater inclusion within the middle school. In two cases, the district afforded many opportunities for

teachers to attend professional development and scoring events. The sixth finding is as follows: *fulfilling reform expectations is dependent, in part, on school district commitment to implementing alternate assessment as part of an overall program design for students with significant disabilities.*

These research findings may seem to imply some action on the part of educational leaders. In the following section, the leadership assessment theory of action framework is reviewed in light of this study's findings and broader conclusions are drawn for leadership practices in states and school districts.

Understanding Findings within an Assessment Theory of Action Framework

The evidence collected for this research study generated a number of findings in regard to alternate assessment. These findings point out the ongoing challenge of implementing alternate assessments to provide meaningful results for educational renewal and improved learning for students with significant disabilities. While each of these findings may indicate some leadership actions, improving educational systems is a much more complex endeavor. Care must be taken to consider local contexts before applying any actions in order to influence systemic change and improvement in instruction and achievement for students with significant disabilities.

The assessment theory of action previously outlined provides a frame for discussion and interpretation of these findings which may inform leadership practice in five areas: exploring "full inclusion" in assessment systems; using alternate assessment implementation as a way to raise teacher expectations; using alternate assessment and

performance data as feedback to promote greater access to the general curriculum; aligning curriculum, instruction and alternate assessment; and finding methods to use alternate assessment results to inform and improve teacher instruction. The five areas of this framework and related findings will be discussed in the following section.

One pillar of the assessment theory of action is examining what it means to fully include students with significant disabilities in assessment systems. Two findings in this study may suggest leadership actions. In the case study data, experience with the portfolio seems to help teachers with embedding alternate assessment activities into classroom routines for themselves and with fostering greater involvement of their students. Leaders may conclude that supporting opportunities for teachers new to the portfolio to collaborate with their more experienced colleagues about embedding alternate assessment procedures will provide more chances for student participation in the WAAS.

Secondly, school district commitment for implementing alternate assessments as part of the overall program design for students with significant disabilities may also help to fulfill reform expectations for increased learning. Within the context of a school and school district, leaders may help teachers to focus on important program goals in a number of different ways. Two methods leaders used in these cases included, one, arranging for early release of students in self-contained classrooms so teachers and other providers could have collaborative planning and time for program review and, two, encouraging teachers to participate in professional development in WAAS assessment scoring and implementation. Therefore, leaders—who understand the potential impacts of

district policies and supports on teachers—may consider more inclusive practices to guide program improvement efforts for all students. For example, leaders may support special education staff in activities similar to those designed for general education teachers, such as encouraging participation in assessment workshops, monitoring student progress, and collaborative planning time.

A second component of the assessment theory of action is using the implementation of alternate assessments as a means to raise teacher expectations for students with significant disabilities. Survey analyses suggested findings that teachers with more portfolio experience may be more likely than teachers new to the portfolio to view the alternate assessment process as leading to changes in access to the general curriculum, instruction, and student achievement. However, case study data supports findings that, regardless of experience, teachers may not understand how to provide instruction in academic content or may focus their expectations and instructional efforts on student mastery of functional skills. Leaders may select different actions based on underlying teacher expectations as well as teacher level of understanding of how to go about teaching academic content to these students.

This apparent difference between teacher survey responses that students are finding greater access to academic curriculum and case study data which suggests limited access has been achieved may have implications for future professional development actions at the state level. In other words, it may do no good to spend hours showing teachers how to design and deliver academic instruction to students with significant disabilities, if they don't believe that reading and mathematics are important skills for

their students to master. Similarly for school district leaders, before taking any steps designed to raise teacher expectations, educational leaders may first consider finding out what goals teachers in the district have set for their students with significant disabilities. Leaders may then be able to implement the appropriate actions to increase student expectations within the context of these teacher beliefs.

Using the implementation of alternate assessments and using valid test interpretations to promote greater access to the general curriculum is the third aspect of the assessment theory of action. The case study data seemed to demonstrate that all three teachers tried to make sense of the WAAS portfolio in light of what they were teaching. Only one teacher was striving to teach academic content and measuring the students' IEP skills in this context. Teachers not collecting student data on academic skills and knowledge found it difficult to interpret portfolio scores as an indicator of program success in access to the general curriculum areas of reading, writing, and mathematics. Case study data also suggests that two of the students were not using optimal modes of communication so that teachers could determine exactly what the students were learning. Since valid test interpretation of WAAS portfolio results depends upon the evidence of learning contained in the portfolio as well as teachers having a complete understanding of the scoring dimensions and rubrics, educational leaders may want to explore how teachers are collecting the student performance data and what challenges arise when assessing academic learning for students who are essentially nonverbal. The information gathered may provide a springboard for a number of leadership actions, such as improving assistive technology communication systems, monitoring classroom data

collection, or providing professional training in matching data collection methods to academic targets.

Aligning curriculum, instruction, and alternate assessment to academic content is the fourth dimension of an assessment theory of action. Case study data provided several examples of misalignment: between skills written by the teacher in the portfolio and goals contained in the IEP; lack of evidence of academic content in standards-based lessons and the portfolio; and weak links to academic content through access skills in both portfolios and classroom instruction. Identifying alignment issues may be only the first step in determining effective leadership actions; the reasons for the misalignment are just as important to consider. For example, a teacher may recognize a misalignment but not know how to teach rigorous academic curriculum to students with significant disabilities. Other teachers may make sense of the WAAS portfolio and find links to classroom curriculum and instruction in another way. Leaders may consider implementing actions to improve alignment only after understanding how teachers make sense of academic instruction for students with significant disabilities, as well as looking at the level of access to the general curriculum.

The fifth area of the assessment theory of action is using assessment data to inform and improve teacher instruction and student learning. Case study data did not single out participation in the portfolio as the primary reason for student achievement. In all three cases, however, teachers said that portfolio data collection helped them to monitor the students' progress. The teachers in these cases said they adjusted teaching and curriculum so that their students could demonstrate IEP skills in other settings with

other people for the portfolio evidence. None of the teachers discussed how they might use the portfolio sub-scores by content or by scoring dimension to inform teaching. Thus, teacher interpretation and use of the alternate assessment process may influence the level of instructional and programmatic changes focused on increasing student academic learning, as well as using actual performance data, at this point in the WAAS program.

The case study data suggesting that teachers may view the WAAS process as strongly informing programmatic changes for these individual students (rather than interpretation of WAAS test scores) was somewhat unexpected. State and school district leaders may take note of this finding for alternate assessment and consider capturing and reporting data on the impacts of implementing the WAAS portfolio on teacher practice, as well as providing information about program success or need for improvements based on WAAS performance results. Documenting changes in assistive technology use, facilitating teacher reviews of scored portfolios, and implementing team planning structures for examining classroom and state assessment data are examples of possible district actions that may guide educational programs and teaching to enhance student gains in academic achievement. Comparison of portfolio scores to other measures of student progress may also provide leaders and teachers with meaningful instructional and programmatic feedback.

While taking leadership actions described in reference to an assessment theory of action may be fruitful, the findings of this study should be carefully considered in light of the limitations of the study. These limitations are described in the next section followed by implications for leadership practice and next steps for research.

Limitations

Readers of this report should consider the findings and conclusions contained in this chapter in light of several limitations. First, the results of the study draw on a relatively small number of teachers, who voluntarily participated in state-led workshops or who volunteered for this investigation. The results of this study are based on (1) secondary analyses of 2003 survey completed by a small non-representative sample of special education teachers regarding the implementation of the WAAS portfolio in Washington, and (2) three cases of teachers and one of their students who had submitted a 2004 WAAS portfolio. The student/teacher cases were chosen purposefully to reflect variation in student characteristics and teacher portfolio experience, thereby offering differing, potentially contrasting, examples of implementation of the alternate assessment.

While student and teacher characteristics varied in each case, this study was designed to build a beginning knowledge base of how the alternate assessment portfolio was being implemented in Washington State. While not representing the full range of teachers or students in the system, the sample captured an important range of settings, student needs, and levels of experience with the alternate assessment process. The patterns of response apparent in and across these cases are therefore able to highlight some important dynamics of the implementation and impact of alternate assessment, even though they do not and cannot portray what is "typical" of teacher response across the state.

A second limitation derives from the difficulty of attributing local changes in

program or performance to the influence of WAAS. This study focused on any possible effects of implementing the alternate assessment portfolio on teachers and students, and based on teachers' testimony, triangulated with classroom observations and documentary records, it is possible to infer that there are a variety of effects. Teachers described changes they had made to IEPs and in data collection, and the overall quality of portfolios sent in for state scoring had improved. Portfolio scores had also risen and students made progress on IEP skills, although not always in academic areas. While these teachers attested to changes they believed were due to the portfolio, we should not assume or assert that reported impacts were due *only* to portfolio implementation. The case studies revealed other factors that are likely to have played a role in the local stories of change apparent in these case settings: district factors, support, and requirements, amount and focus of teacher professional development, individual student needs and maturation levels, were among the influences may have played a role in educational changes observed in these cases.

A third limitation reflects the particular timeframe in which the study took place, in relation to national developments in the area of alternate assessment for students with significant disabilities. The national landscape on the topic of alternate assessment changed considerably across the period of time embraced by the study, and it continues to evolve. State alternate assessments were implemented beginning in the 2000-2001 school year and national guidance requiring academic content and standards for scoring alternate assessments was not forthcoming in the early years. Since national standards for alternate assessments are relatively new on the assessment scene, many states, including

Washington, have implemented changes to improve the alternate assessment process and the level of professional support for teachers. These improvements and changes in federal guidance are expected to continue to occur. These developments may alter the dynamics of implementation response somewhat in the future, and they certainly have implications for findings and conclusions drawn from this study, which may become obsolete in light of anticipated changes. Alternately, the new developments on the national scene may shift the local focus of leadership action noted in the assessment theory of action.

Despite these limitations, the results of this study may still inform state and school district leadership policy and practice in supporting the appropriate implementation and use of the WAAS portfolio assessment in Washington. The implications for leadership practice as well as recommendations for research are projected and summarized in the following section.

Implications for Practice and Next Steps for Research

This study provides some of the first evidence of how alternate assessment portfolios are being implemented in Washington and includes documentation of some educational changes noted in survey research and which followed that implementation in three case studies. The research findings may be situated within an assessment theory of action which implies some leadership action and considerations for assessment practices. These case study findings and survey results raise questions about what leaders may do to enhance the usefulness of the alternate assessments for students with significant disabilities. In summary, several observations arising from the study findings are offered

to educational leaders for consideration within their local settings:

- Leaders, understanding the potential impacts of district assessment policies on teachers, may consider more inclusive practices to guide program improvement efforts for all students.
- Before taking any steps designed to raise teacher expectations, educational leaders may first consider finding out what goals and outcomes teachers have in mind for their students with significant disabilities, in order to select appropriate actions to increase student expectations.
- Educational leaders may want to find out how teachers are collecting student performance data and what challenges arise when assessing academic learning for students who may have limited modes for expression.
- Leaders may consider identifying how teachers make sense of curriculum and instruction with alternate assessment, as well as examine the level of programmatic access to the general curriculum for students with significant disabilities, before implementing actions to improve alignment.
- State and school district leaders may note the impacts of implementing the elements of alternate assessment on teacher practice, as well as provide information about program success or need for improvements based on alternate assessment performance results.

The implications for leadership practice in light of these observations and study findings can be powerful. For example, if teachers learn to collect data to make

instructional decisions, as well as to supply documentation for the portfolio, then the assessment process may have the potential to enhance instruction. Leaders can choose strategic actions to support teachers in activities, such as periodic, collaborative data reviews and portfolio preparation the school year. In other contexts where student expectations are limited, leaders can provide examples of research-based practices that produce gains for students with significant disabilities. Teachers will also need many examples of how to teach and assess academic content for students with significant disabilities (Browder et al., 2005). Leaders may promote greater access to the general curriculum and closer alignment to reading and mathematics, in this case, by examining teacher beliefs first before engaging in deep alignment activities. Evaluation is also an important action for educational leaders to undertake in regard to alternate assessment. Leaders may study the possible impacts of implementing the portfolio on instruction and programs, as well as monitoring test scores trends. The actions a leader takes in interpreting and reporting assessment practices for students with significant disabilities and their teachers can inform teacher practice and, ultimately, student learning.

Future research is needed to address student needs for those with significant disabilities, as well as to support teachers, in implementing the alternate assessment portfolio in Washington. Research may be indicated for better understanding teacher perceptions of and engagement with the alternate assessment process. If the alternate assessment is thought to have impacts on learning, it will be important to understand how teachers make sense of the portfolio in relation to what they teach. A related question for inquiry is to further explore what methods teachers use to align assessment and

instruction to state standards. Another area, worth considering for case study work or future surveys, is researching perceived changes in linking IEPs to state standards in response to federal mandates. A deeper probe into contextual factors within local school districts in relation to assessment and accountability systems also seems to be indicated for future research. Until more case studies and action research surrounding alternate assessment are conducted in state and school district contexts, the impacts of alternate assessment may remain as individual and varied as the students themselves.

The promise of alternate assessment to produce more inclusive policies, create higher expectations, increase access to the general curriculum, improve instruction and extend learning for students with significant disabilities has yet to be fulfilled. This research study has attempted to provide some insights into how the WAAS portfolio was implemented and what educational changes have occurred in three classrooms since the inception of the alternate assessment program. There is hope that through research and leadership action, continued efforts to include all students in the benefits of school renewal will come to pass.

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APPENDIX A

2003 State Survey Instrument

Teacher Survey on the Portfolio Alternate Assessment - Fall 2003

Part I: Please circle the number of the level of agreement as it relates to students in special education:

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
1. It is important that all students be included as a part of Washington state's standards-based assessment system.	1	2	3	4	5
2. I see benefits to having my students included in the state assessment system.	1	2	3	4	5
3. The portfolio is an appropriate alternate assessment for students with significant disabilities.	1	2	3	4	5
4. Students with significant disabilities should be involved in developing their portfolios.	1	2	3	4	5
5. I know how to gather the evidence in order to complete the WAAS portfolio assessment.	1	2	3	4	5
6. I am confident in designing learning activities for students with significant disabilities that provide access to the general curriculum (i.e. EALRs).	1	2	3	4	5
7. My students with significant disabilities regularly participate in standards-based activities in a special education class with age/grade appropriate peers.	1	2	3	4	5
8. My students with significant disabilities regularly participate in standards-based activities in a general education class with age/grade appropriate peers.	1	2	3	4	5
9. I frequently collect evidence of student progress toward IEP goals and objectives.	1	2	3	4	5

Part II: Please circle the number that indicates the level of change, if any, in the areas below as students and teachers in special education participate in the WAAS alternate assessment:

	Much Less	Less	No Change	More	Much More
1. Student access to the general curriculum (EALRs).	1	2	3	4	5
2. Linking of the IEPs to the EALRs or EALR Extensions.	1	2	3	4	5
3. Embedding portfolio elements into instruction.	1	2	3	4	5
4. Participation of students with disabilities in standards-based activities.	1	2	3	4	5
5. Inclusion of students with disabilities in general education classes.	1	2	3	4	5
6. Student application of IEP skills (in different settings, with different people, etc.) that are linked to the EALR Extensions.	1	2	3	4	5
7. Student achievement on IEP goals and objectives that are linked to the EALR Extensions.	1	2	3	4	5

8. When considering any changes indicated in items 1-7 above, please check the reason(s) for changes.

Reasons:	IDEA '97	ESEA	District Requirement	Participation in WAAS	Professional Development	Other (Please specify)
a. Student access to the EALRs.						
b. Linking of IEPs to EALR Extensions.						
c. Embedding portfolio elements into instruction.						
d. Participation in standards-based activities.						
e. Inclusion in general education classes.						
f. Student application of IEP skills.						
g. Student achievement on IEP skills.						

Part III: Please provide the following demographic information.

1. Current Position		Teacher		Administrator		Specialist		Other _____
2. Total Years in Education Profession		0 to 5		6 to 10		11 to 15		Longer than 15
3. Experience with Portfolio		None - Skip to # 6		1 year		2 years		3 or more years
4. Average Hours Spent to Construct One Portfolio *		1 to 15 *		16 to 30 *		31 to 45 *		More than 45 * (not including data collection hours)
5. Previous		*WAAS*		*Portfolio*		*Scoring*		*Experience*
a. As a Scorer		None		1 year		2 years		3 or more years
b. As a Table Leader		None		1 year		2 years		3 or more years

6. Additional Comments:

If you have questions or require assistance in completing this survey, please contact: Nancy Arnold, (360) 725-6089; email: narnold@ospi.wednet.edu; FAX (360) 586-2728.

APPENDIX B

Case Study Interview Protocols

Impact of Implementing the Washington Alternate Assessment Portfolio

Semi-Structured Interview Guide - Parent

The purpose of this interview is to document the experiences and opinions of stakeholders involved with the Washington Alternate Assessment Portfolio. Teacher and parent interviews will be conducted individually. You have agreed to participate in this interview and I will be tape recording your responses to some questions about participation in the alternate assessment portfolio last year. Some questions will be general and some will refer to the student. Participants and students are not identified by name in any transcript or reporting document.

Experience with WAAS portfolio

Tell me about your child.
How would you describe your involvement, if any, in the portfolio?
How would you describe your child's involvement in the portfolio?

Impact on educational program

Tell me about your child's current Individualized Education Program (IEP) goals and objectives that help your child to participate and progress in the general curriculum.
Describe how these IEP goals and objectives for your child may have changed over the past few years.
Please describe some of your child's educational activities that relate to reading, writing, or mathematics.

Impact on student learning

How would you describe your child's progress toward reaching current IEP goals and objectives?
How does this progress compare to previous years?
How well does your child generalize and use IEP skills in different ways?
How does this generalization of IEP skills compare to previous years?

Contributing factors

What impacts did participating in the alternate assessment portfolio have in your child's program (IEP or activities)?
What impacts did participating in the alternate assessment portfolio have in your child's achievement of IEP skills?
What may be other contributing factors to any changes in your child's program?
What may be other contributing factors to any changes in your child's achievement?

Impact of Implementing the Washington Alternate Assessment Portfolio Semi-Structured Interview Guide - Teacher

The purpose of this interview is to document the experiences and opinions of stakeholders involved with the Washington Alternate Assessment Portfolio. Teacher and parent interviews will be conducted individually. You have agreed to participate in this interview and I will be tape recording your responses to some questions about participation in the alternate assessment portfolio last year. Some questions will be general and some will refer to the student. Participants and students are not identified by name in any transcript or reporting document.

Experience with WAAS portfolio

Tell me about your experience with the alternate assessment portfolio.
What specific steps did you take to implement the alternate assessment portfolio?
How would you describe student ___'s involvement in the portfolio?

Impact on educational program

Tell me about student ___'s current Individualized Education Program (IEP) goals and objectives that help student ___ to participate and progress in the general curriculum.
Describe how these IEP goals and objectives for student ___ may have changed over the past few years.
Please describe some of student ___'s educational activities that relate to reading, writing, or mathematics.
Describe how the nature or location of these educational activities may have changed, if at all, over the past few years.

Impact on student learning

How would you describe student ___'s progress toward reaching current IEP goals and objectives?
How does this progress compare to previous years?
How well does student ___ generalize and use IEP skills in different ways?
How does this generalization of IEP skills compare to previous years?

Contributing factors

What impacts did participating in the alternate assessment portfolio have in student __'s program (IEP or activities)?
What impacts did participating in the alternate assessment portfolio have in student __'s achievement of IEP skills?
What may be other contributing factors to any changes in student __'s program?
What may be other contributing factors to any changes in student __'s achievement?

APPENDIX C

Case Study IEP Observation and Collection Forms

Impact of Implementing the Washington Alternate Assessment Portfolio

IEP Observation Form

Student _____ Date of Collection_____

Pre Observation Data

Content Area _____
Intended Goal of the Lesson (skill or knowledge):
_____
Targeted EALR/GLE:
_____
Student's IEP skill:
_____

Observation Data

Match of activity observed to content area; intended goal of the lesson (skill or knowledge); targeted EALR/GLE; and student's IEP skill:

_____

_____

_____

_____

Observations on student behaviors, including level of engagement in activity, use of IEP skill, types of supports and modifications, interaction with teacher and others:

_____

_____

_____

_____

Impact of Implementing the Washington Alternate Assessment Portfolio
IEP Collection Form

Student _____ Date of Collection_____

Current IEP
Does the IEP have goals and objectives linked to state standards for the content area?
(yes or no) (write skill from IEP)

Reading goal____ Wording_____

Reading objectives____ Wording_____

Writing goal____ Wording_____

Writing objectives____ Wording_____

Mathematics goal____ Wording_____

Mathematics objectives____ Wording_____
* IEP skill observed in classroom activity

Other IEP links to the general curriculum, such as location of services, PLEP, etc.:

_____

_____

Previous IEP (one year ago)
Did the IEP have goals and objectives linked to state standards for the content area?
(yes or no) (write skill from IEP)

Reading goal____ Wording_____

Reading objectives____ Wording_____

Writing goal____ Wording_____

Writing objectives____ Wording_____

Mathematics goal____ Wording_____

Mathematics objectives____ Wording_____

Other IEP links to the general curriculum, such as location of services, PLEP, etc.: -

_____

Student _____ Date of Collection_____

Previous IEP (Two years ago)

Did the IEP have goals and objectives linked to state standards for the content area?

(yes or no) (write skill from IEP and any evidence of alignment)

Reading goal____ Wording_____

Reading objectives____ Wording_____

Writing goal____ Wording_____

Writing objectives____ Wording_____

Mathematics goal____ Wording_____

Mathematics objectives____ Wording_____

Other IEP links to the general curriculum, such as location of services, PLEP, etc.:

_____

_____

Evidence of differences in alignment with state content standards or change in access to the general curriculum in the IEPs across years:

_____

_____

_____

_____

_____

VITA

Nancy Arnold was born in Long Beach, California, and has taught in California and Washington since 1975. She earned a Bachelor of Arts degree in Mathematics at UC Berkeley and a Master of Arts in Educational Leadership at Pacific Lutheran University in Tacoma. In 2006 she earned the Doctor of Education at the University of Washington and is currently an assistant director for Special Services in the Puyallup School District in Washington. Formerly, she was the Alternate Assessment Specialist for the State of Washington and currently lives in Olympia.