# Making a Difference in Student Achievement and Teacher Attitudes with On-going Professional Development in Guided Language Acquisition Design

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A Special Project

Presented to

Dr. Bob Smart and Mr. Erich Bolz

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# FACULTY APPROVAL

Making a Difference in Student Achievement and Teacher Attitudes with On-going Professional

Development in Guided Language Acquisition Design

Approved for the Faculty	
	, Faculty Advisor
	Date

#### **ABSTRACT**

A district in Washington State had been struggling with students not meeting Annual Yearly Progress. The district hired two Guided Language Acquisition Design trainers to administer reading and writing strategies to teachers on a monthly basis. Teachers were encouraged to attend the on-going monthly trainings. Fall to spring MAP tests were analyzed from the teachers who attended the trainings. Pre and post-surveys, interviews and walkthroughs were given to gauge teacher attitudes towards Guided Language Acquisition Design and overall teaching. The results showed an increase in teacher attitudes and student achievement with the teachers who attended the monthly trainings.

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#### CHAPTER 1

#### Introduction

# Background for the Project

There is a need for districts to provide professional development to teachers so that student outcomes are improved as a direct result. The benefits of professional development, translated into student achievement gains has been examined in one rural school district, "Three Rivers District." The chosen rural school district is located in southeast Washington State. There are approximately 60 teachers and 940 students. Beginning in the 2009-2010 school year, 28 teachers had attended professional development training, specifically Guided Language Acquisition Design (GLAD) training. After participating in initial professional development, teachers had the opportunity to utilize the strategies. The design of GLAD was to train teachers, hire on-site coaches and send a select few teachers to obtain certification in GLAD training to be able to continue training in the district. However, due to lack of funds from the district, the ongoing training and certification was unable to be funded.

In the 2012-2013 school year, the district hired two coaches from a nearby school district in addition to a GLAD liaison to facilitate monthly GLAD Reinforcement and Resources (R&Rs) to teachers. GLAD R&Rs were monthly training sessions facilitated by GLAD certificated trainers. With the added monthly GLAD R&Rs, there had been a positive change in teachers attitudes who attended GLAD R&Rs and that effort translated into increased student achievement.

#### Statement of the Problem

The district, particularly the middle school, was not showing enough academic gains to make Adequate Yearly Progress (AYP). AYP was signed into law in 2002 as the No Child Left Behind (NCLB) Act. It is a year to year comparison of student achievement on the state assessment in reading and math. The district continued to see a change in their demographics which was trending towards a slow, but steady increase in the Hispanic population. The issue of poverty is a factor that never goes away of a district of this small size. The number of free and reduced meals, a generally accepted proxy for poverty, was approximately 71% district wide. The school provided free breakfast and lunch to all students. Professional development became one of the district's necessary changes to make an increase in student achievement.

# Purpose of the Project

The goal of this project was to determine if monthly GLAD R&Rs helped strengthen and positively reinforced the teacher's classroom environment, which in turn increased student achievement on the Measures of Academic Progress (MAP) scores, which is an indicator of student achievement that is highly correlated to State assessments. In addition, the purpose of the research was to determine if on-going professional development would show an improvement in teacher instruction and attitude that directly correlated into an increase on student achievement on the fall to spring MAP scores.

## **Delimitations**

Washington State has replaced the AYP with Annual Measurable Objectives (AMOs).

AMOs are reading and writing targets for the schools to meet each year as directed by the State of Washington Office of Superintendent of Public Instruction (OSPI). The State classified each

district as a reward, priority, focus or emerging school. The middle school in the district being reviewed was classified as an emerging school, which is explained as more than one-half of the subgroups not meeting AMOs. The subgroups not meeting AMOs included Hispanic students and special education students. There was an immediate need for the district to make changes especially at the middle school level to meet the AMOs. The district's student population was approximately 58% white and 37% Hispanic (see Figure 1) with a 71% enrollment in free or reduced-price meals. In addition, 6% of students were special education students.

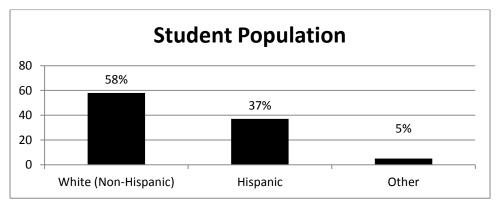


Figure 1. Student population in 2012.

Washington State transitioned from Grade Level Expectations (GLEs) and Essential Academic Learning Requirements (EALRs) to Common Core State Standards (CCSS). By the year 2014-2015, each district must be in full implementation of CCSS. With the state's adoption of CCSS, there will also be a new assessment, the Smarter Balanced tests, which will replace the math, reading and writing portions of the MSP in 2014-15. In high school, the Smarter Balanced tests are administered in 11th grade. The district decided to invest in on-going professional development in GLAD to continue to grow with the surrounding districts and state.

#### Assumptions

The addition of ongoing GLAD R&Rs being attended by approximately 50% of the teacher base, would imply an improvement on the district's AMOs. The GLAD R&Rs suggests an improvement in student achievement in the classrooms with the teachers who attended the monthly training sessions. The teachers who participated in the trainings more than others would show a more pronounced increase in student achievement.

## Hypothesis or Research Question

Teachers who attended the monthly GLAD R&Rs had an increase in student achievement and a more positive attitude towards teaching GLAD strategies.

# Null Hypothesis

Teachers who attended the monthly GLAD R&Rs did not show an increase in student achievement and no change in attitudes towards teaching GLAD strategies.

#### Significance of the Project

With intensified demands coming from the state, the district looked at numerous ways to improve student achievement. The School District chose to hire two trainers to conduct monthly R&Rs for the 2012-2013 school year, who helped teachers rejuvenate their teaching by a monthly reminder of the GLAD strategies that had been forgotten. The district believed the GLAD program was needed to create teacher and student success.

#### Procedure

The researcher collaborated with the two GLAD trainers. Approximately, 28 teachers voluntarily signed up for the monthly GLAD R&R trainings. The researcher recorded the

attendance rates of those teachers who attended the trainings. The researcher also placed a calendar sign-up sheet in the GLAD workroom for teachers to sign their names when they worked in the work room. In addition, the researcher sent out a pre- and post-survey to all 28 teachers involved in the study; the survey was approved by the school principal. Lastly, the researcher interviewed teachers to determine their perceptions around whether GLAD improved their instruction and increased student achievement.

# **Definition of Terms**

Annual Measurable Objectives. Annual Measurable Objectives are yearly reading and writing targets for each subgroup, school and district to meet in Washington State. Washington set new AMOs to improve the reading and math gaps by half by 2017.

Common Core State Standards. Washington State has moved from Grade Level Expectations to math and English Language Arts Common Core State Standards. CCSS are high standards that are consistent across 45 US states and provides teachers, parents, and students, kindergarten to 12, with a set of clear expectations that are aligned to the expectations in college and careers.

Essential Academic Learning Requirements. Essential Academic Learning Requirements are the current Washington State learning standards. However, the Common Core State Standards are in the process of being adopted by Washington State and will be the new learning standards.

Grade Level Expectations. The Grade Level Expectations stemmed from Washington State Essential Academic Learning Requirements. Grade Level Expectations were expectations for the EALRS specific to each grade level.

# Acronyms

AMO. Annual Measurable Objectives.

AYP. Adequate Yearly Progress.

BERC. Baker, Evaluation, Research, and Consulting.

CCSS. Common Core State Standards.

**EALRs**. Essential Academic Learning Requirements.

EL. English Language.

ELL. English Language Learner.

GLAD. Guided Language Acquisition Design.

GLEs. Grade Level Expectations.

MAP. Measures of Academic Progress.

MSP. Measurements of Student Progress.

NCLB. No Child Left Behind

NWEA. Northwest Evaluation Association.

OBEMLA. Office of Bilingual Education and Minority Languages Affairs.

OSPI. Office of Superintendent of Public Instruction.

<u>R&Rs</u>. Reinforcement and Resources.

TVAAS. Tennessee Value-Added Assessment System.

#### **CHAPTER 2**

#### Review of Selected Literature

# Introduction

# Teacher's Impact on Student Learning

Albert Einstein once said, "It is the supreme art of the teacher to awaken joy in creative expression and knowledge" (Edmiston, 2008, p. 57). Teachers have an enormous role in helping students achieve their highest academic potential. Marzano (2007) stated, "...an effective school is the individual teachers within that school" (p. 1). It is clear to educators that all students must reach high levels of achievement regardless of ethnicity, poverty, or other disadvantaging circumstances. A study in Tennessee (TVAAS) states their findings that, "teacher effectiveness is the most important factor in the academic growth of students" (Sanders & Horn, 1998, p. 250). Quality teaching makes a difference. Buffum, Mattos and Weber (2009) agree, stating, "The quality of the classroom teacher is the most significant factor in maximizing student learning" (p. 78).

According to Hattie (2003),

"Teachers account for about 30% of the variance of achievement while the student accounts for 50%. It is what teachers know, do, and care about which is very powerful in this learning equation. Teachers can and usually do have positive effects, but they must have exceptional effects. We need to direct attention at higher quality teaching, and higher expectations that students can meet appropriate challenges - and these occur once the classroom door is closed" (p. 2).

Effective professional development will aid in higher quality teaching and higher expectations in the district and inevitably, student achievement should increase.

The Baker Evaluation, Research, and Consulting (BERC) Group (2012) states, "Research shows that the culture of the school must be fundamentally changed before academic achievement for students is likely. Meaningful reform can only move forward through Second Order changes. Creating a new school culture where professional development centers on researched-based instructional practices appears to be the key to providing the best chance for all students to be successful" (p. 1).

## Effectiveness of Professional Development

Because teachers had a large impact on what students were learning, professional development was an important factor to help build teacher's attitudes, align curriculum and increase knowledge on best practices. "Professional development in the education world means a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (Byrnes, 2009, p. 3). Reeves (2010) agreed stating, "If we expect teachers and school leaders to improve professional practices and decision making, then we must first give them different knowledge and skills than they have received in the past" (p. 15).

"Professional development is a vehicle through which teachers enhance knowledge and skills that can lead to school improvement and increase student achievement" (Byrnes, 2009, p. 3). Furthermore, "if a new program or innovation is to be implemented well, it must become a natural part of practitioners' repertoire of professional skills. For advances to be made and professional improvement to continue, the new practices and techniques that were the focus of the professional development program must become used almost out of habit. In order for this to occur, continued support and encouragement are essential" (Guskey, 1991, p. 244). Reeves (2010) discussed three essential characteristics for high-impact professional learning, "a focus on

student learning, rigorous measurement of adult decisions and a focus on people and practices, not programs" (p. 15).

Helping teachers to understand more deeply the content they teach and the ways students learn is vital for effective professional development. Educators at all levels value opportunities to work together, reflect on their practices, exchange ideas, and share strategies. But, research on teachers shows that individuals can collaborate to block change or inhibit progress just as easily as they can to enhance the process. For collaboration to bring its intended benefits it, too, needs to be structured and purposeful, with efforts guided by clear goals for improving student learning. (Guskey, 2003, p. 748). Lutnpe and Chambers (2001) agree that teachers enter professional development programs with certain attitudes and behaviors that will affect its implementation and future teacher behavior and student learning. (p. 93).

Learning Forward is a professional development organization created by teachers who are dedicated to help change the future of leadership in schools and believes that continuous learning by educators is essential to improve the achievement of all students. This organization agrees that to achieve school performance, schools must strive to provide proficient teaching school wide. Learning Forward states, "Effective professional development fosters collective responsibility for all students rather than individual responsibility for some students. Professional development conducted in teams creates an environment with teachers of shared responsibility" (learningforward.org).

In order to make the professional development experience more likely to be implemented, relevant, and more rewarding, it is important to examine teacher attitudes. Relevant professional development has the potential to shape teacher practices and improve student achievement (Byrnes, 2009, p. 9). Effective professional development makes the

connection between subject matter and pedagogy. It creates regular opportunities for serious collaborative planning, expands teachers' repertoires of research-based instructional methods, and links teachers to other professionals within and outside their schools (Hirsch & Sparks, 2000, p. 42).

The duration of professional development activities is expected to be important in two ways. First, longer activities are more likely to provide an opportunity for in-depth discussion of content, student conceptions and misconceptions, and pedagogical strategies. Second, activities that extend over time are more likely to allow teachers to try out new practices in the classroom and obtain feedback on their teaching (Garet, Porter, Desimone, Birman, &Yoon, 2001, p. 38).

# Guided Language Acquisition Design (GLAD)

The GLAD model was researched, developed and field tested by Brechtel and Haley. Project GLAD is an instructional model with clear, practical, reading and writing strategies promoting positive, effective interactions among students, and between teachers and students. GLAD develops the metacognitive use of high level, academic language and literacy. According to Project GLAD National Training Center, during the two day staff development, teachers are provided with the instructional strategies, theory, and research that support the model and the curriculum model that brings these all together in the context of district and state frameworks and standards. In addition, there is a five day session in the classroom where the model is demonstrated with students (2012).

GLAD is a United States Department of Education, Office of Bilingual Education and Minority Languages Affairs (OBEMLA), Project of Academic Excellence; a California Department of Education Exemplary Program, a model reform program for the Comprehensive

School Reform Design, and training model for five Achieving Schools Award Winners. On the Project GLAD National Training Center website it states that GLAD was the recommended K-8 project by the California State Superintendent of Schools for teachers of English learners. It is also highlighted as a California Department of Education "Best Practices" program for Title III professional development funding (2012).

The ultimate goal of Project GLAD is to ensure that all students, English Language

Learners (ELLs) and native English speakers, are able to read and write grade-level text. Project

GLAD seeks to accomplish this by training teachers to use instructional reading and writing

strategies that can be integrated with any curriculum in different subject areas. Dietel, Herman,

and Wolf (2010) recommend that, "Schools should integrate academic language instruction

along with content instruction to improve assessment validity and increase ELLs' opportunity to

learn" (p. 4). The GLAD model supports a focus on creating meaningful connections including
those between prior knowledge and new information, connections between content areas, and
links among the areas of receptive language (reading and listening) and expressive vocabulary

(writing and speaking) (Brechtel, 2001, p. 18).

Project GLAD teaches educators numerous reading and writing strategies with hands-on activities and brain inputting in mind. "Student learning occurs at the classroom level, linking specific gains in student learning to specific teaching strategies" (Reeves, 2010, p. 15).

GLAD includes a collection of innovative strategies designed to help all levels of ELL and native English students access core curriculum while acquiring English skills and vocabulary. According to Hansen (2006), the GLAD strategies that were very effective in

helping students in language development and reading were process grids, sentence patterning charts, and 10/2 (p. 24).

Process grids are grids with categories across the top and down the side. They build confidence and comprehension along with comparing and contrasting related categories. The process grid is color chunked into small sections while the teacher and students write the information in the correct category. "Learning proceeds more efficiently if students receive information in small chunks that are processed immediately" (Marzano, 2007, p. 44).

One essential component of reading is learning vocabulary, and the challenge facing English language learners when developing a word meaning vocabulary has been gaining enough vocabulary knowledge to comprehend words and sentences, and in turn, comprehending enough words and sentences so that more vocabulary can be learned. Engaging word-focused activities and frequent rehearsals are likely to yield the best results in mastering reading (Laufer, 2009, p. 342). The sentence patterning charts is a GLAD strategy designed to take a targeted vocabulary word and build it into a sentence for a deeper understanding of the word and its meaning. The sentence patterning chart helps students with the learning of vocabulary words, parts of a sentence, and sentence structure.

A GLAD strategy, backed by brain researcher, Costa (as cited in Brectel, 2001, p. 134) is 10/2. 10/2 essentially is for teachers to teach or lecture for 10 minutes and 2 minutes for students to process the information. It allows for comprehensible output and negotiating for meaning. Medina (2008) agrees that 10/2 is an effective strategy for teachers to use in their classrooms, "Before the first quarter-hour is over...people usually have checked out" (p. 74). The brain seems to be making choices according to a ten minute timing pattern.

Pictorial inputs are used for front loading information at the beginning of a unit. Pictorial inputs build on prior knowledge and brain patterning for the students "...activation of prior knowledge is critical to learning of all types" (Marzano, Pickering, & Pollock, 2001, p. 91). Medina (2008) explains that if information is presented orally, people remember about 10 percent, tested 72 hours after exposure, the figure goes up to 65 percent if a picture is added (p. 234). For a critical input experience, each learning goal involves two or three experiences to ensure students process content deeply and comprehensively (Marzano, 2007, p. 40).

Chants are another GLAD strategy that have been created to include targeted vocabulary words for a unit. The rhyming of poetry or song enhances memory. Hadaway, Vardell, and Young, (2001) agree stating that, "...discussing poems allows students to use the language-both basic communicative and academic-that they are learning to move to higher levels of proficiency. The brevity and conciseness of poetry provide helpful scaffolding to longer texts as well as practice with meaningful content, and practicing choral reading is a collaborative and nonthreatening way to participate orally" (p. 54) "The usefulness of poetry ... engage students, meet individual needs within the group, and aid in comprehension" (Collins, 2008, p. 82).

Picture file cards are used to develop higher-level thinking. The picture file cards are a set of thought or emotion provoking, content-based pictures used to provide background information. They are used to stimulate writing and language practice.

The cooperative paragraph allows the teacher to teach and model the conventions of writing and the process of revising. The teacher always gives the topic sentence. Each team comes up with a supporting sentence to the topic sentence and writes it on a sentence strip. With the whole group, the students create a paragraph with the team's strips. Students are given time to experience content from multiple perspectives. This has positive effects of learning with

students. "Cooperative learning promotes higher individual achievement than do competitive approaches or individualistic ones" (Johnson, D.W, Johnson, R.T, & Smith, K., 1998, p. 31).

Marzano, Pickering, and Pollock agree stating that cooperative learning may be the most flexible and powerful (grouping strategy) (p. 111).

Teacher-Made big books address the specific content and linguistic needs of each individual in the classroom. Big books focus on specific English Language (EL) Common Core State Standards. The big book key features are patterning and predictability. It is a tool that introduces a subject that hooks and motivates students.

# The Impact on ELL

The GLAD model provides a language-rich environment for ELL students. With the professional development of GLAD R&Rs and the GLAD strategies, the teachers could positively impact student achievement. Reading and writing strategies and teacher's questions are powerful tools for guiding the linguistic and cognitive development of English Language Learners.

There were approximately 15% of students enrolled in "Three Rivers District" who were placed in a bilingual or ELL class. The district was eligible and received funding for the State Transitional Bilingual Instructional Program. The district had over 135 students across the district who qualified for this program. Project GLAD was the primary framework that teachers used for Content-Based English as a Second Language program. The bilingual or ELL class offered in the district was held one hour a day. "Professional development in working with ELLs in the mainstream classroom is particularly needed in rural communities and small cities" (Liams, Shafer, & Walker, 2004, p. 132). Brechtel (2001) agreed by stating, "Many native

speakers of English come to school without the background knowledge or language skills necessary to make sense of the printed word" (p. 1).

There is an increased likelihood that teacher attitudes regarding English language learners in mainstream classrooms will significantly deteriorate over the next several years. The reasons for this are several: (1) the number of language-minority speakers in the US continues to grow, (2) teachers across the nation are significantly lacking in training for how to educate ELLs in the mainstream classroom, (3) immigrants and refugees are settling in less populated areas with little experience in linguistic and cultural diversity, overwhelming schools and teachers in these regions, and (4) recent changes in federal legislation are stringently holding schools and teachers accountable for the academic achievement of English language learners, which may result in a backlash against the very students the legislation is supposed to help (Liams, Shafer, & Walker, 2004, p. 132).

With the help of GLAD strategies and GLAD R&Rs, Three Rivers District hoped that teachers were better prepared as the district's Hispanic enrollment increased. The GLAD instruction had originally targeted ELL students who struggled in the classrooms. GLAD helped students develop a sense of identity and voice as they learned to read, write, and speak English and grow academically in other areas.

#### Summary

Teachers make a difference in students' lives either positively or negatively. "If the relationship between the teacher and the students is good, then everything else that occurs in the classroom seems to be enhanced" (Marzano, 2007, p. 150.) Ongoing professional development

is crucial to help teachers stay current in their field as any other professional job. Project GLAD has compiled effective reading and writing strategies into a program for teachers to use the best practices of teaching. With effective teaching strategies and on-going professional development, the district may enjoy a benefit from implementing GLAD.

#### **CHAPTER 3**

## Methodology and Treatment of Data

#### Introduction

Two certified GLAD trainers were hired out of district to conduct training each month. In addition, teachers who attended GLAD R&Rs were paid each time they attended training and the district's GLAD liaison also received a \$500 stipend. The researcher reviewed the teacher's attitudes toward GLAD and the training they received.

## <u>Methodology</u>

The methodology was a mixed methods design with an emphasis of action research. What was used was a mix of both qualitative and quantitative methods, also explained as the exploratory mixed method design. (Gay, Mills, and Airasian, 2012, p. 484.). The Qualitative data collected included, walkthroughs of the classrooms and voluntary teacher interviews. The Quantitative data collected included teacher surveys, a calendar/sign-in sheet and student MAP scores from September-March. The purpose of the study was to determine if teachers who attended the monthly GLAD R&Rs had an increase in student achievement and a more positive attitude with teaching.

## **Participants**

There were 28 teachers in the district who had registered to attend monthly GLAD R&Rs. This group of 21 females and 7 male teachers were involved in the study. 18 teachers were teaching at the elementary level, 10 teachers were teaching at the middle school level and zero teachers registered to attend the R&Rs at the high school level. The researcher also attended the GLAD R&Rs and was the GLAD liaison for the district.

#### Instruments

Pre- and post-surveys were delivered to all 28 participants. The pre-survey was pertaining to their experience of GLAD strategies, what year they attended their initial GLAD training, and how comfortable they were in using GLAD strategies in their classroom. A total of 22 teachers responded to the pre-survey and 15 teachers responded to the post-survey (a copy of the survey is included in the Appendix).

A calendar was located in the teachers' GLAD room. The researcher asked the participants to sign in on the calendar on the days they worked in the GLAD workroom to measure participation and accountability.

Fall and spring Measures of Academic Progress (MAP) test scores from each participant's class was collected to determine a substantial growth from the participant's use of GLAD strategies. The researcher analyzed the mean RIT scores of each class and determined if there was an adequate point increase indicating student growth. The typical RIT Growth from period to period was determined by Northwest Evaluation Association (NWEA) and was different for each grade level.

## Design

The researcher used walkthroughs, participation sign in calendar, interviews, pre and post-surveys and MAP scores to show a correlation between GLAD R&Rs and student achievement.

#### Procedure

A survey was delivered to all 28 participants; 22 responded to the pre-survey and 15 teachers responded to the post-survey. Data was collected and provided to the two GLAD trainers for their understanding of how the participants regarded the use of GLAD strategies in the classroom. The data also included what GLAD strategies they currently used and what strategies they would have liked to learn more about. The GLAD trainers planned to address each question and GLAD strategy mentioned in the survey throughout the course of the year.

The GLAD coaches, hired by the district, planned and presented different strategies for each monthly training. In order to gauge teacher attitude, participants who attended the GLAD R&Rs signed in to track their attendance. The teachers were encouraged to use the GLAD supplies located at the recently assembled GLAD workroom to create new materials for their classroom. Participants were also encouraged to sign in when they utilized the room.

Walkthroughs were conducted at the end of the school year to control for use of GLAD strategies. Interviews were prepared for the end of the year regarding the teacher's behavior, attitude and belief in how effective GLAD strategies were in their student achievement supported by the MAP scores.

# Treatment of the Data

The researcher assigned each teacher a randomized number to indicate confidentiality.

The researcher created an Excel table that showed the number of teachers and days they utilized the GLAD workroom. Surveys were collected and analyzed. The researcher asked the same or similar questions during each semi-structured teacher interview. MAP scores were collected and analyzed by the researcher.

## Summary

The researcher was interested to know if the added GLAD R&Rs would make a difference in teacher attitudes and student achievement. A pre- and post-survey was conducted with the selected teachers. A sign-in sheet was filled out by teachers who utilized the GLAD room. Walkthroughs occurred at the end of the school year. Interviews conducted with teachers who participated in the GLAD R&Rs. The fall and spring MAP scores were collected.

#### **CHAPTER 4**

#### Analysis of the Data

#### Introduction

The study looked at 23 GLAD trained teachers in the district who participated in monthly GLAD R&Rs provided by the district. The researcher determined if the GLAD R&Rs made an impact on student achievement as evidenced by MAP scores, surveys, interviews, workroom usage, and R&R attendance.

## Description of the Environment

Twenty-eight teachers signed up to participate in the six GLAD R&Rs at the beginning of the 2012-2013 school year. Of those teachers, five were eliminated from the study due to a lack of participation which brought the number to 23 teachers who were involved in the study. The data collected from the GLAD workroom also included the researcher in the study group. The researcher did not participate in the pre-, post-survey, interviews or walkthrough of the GLAD strategies. The GLAD workroom calendar provided one source of information possibly related to the frequency and intensity of implementation by the individual teachers involved in the study.

## Hypothesis/Research Question

Teachers who attended the monthly GLAD R&Rs had a statistically significant increase in student achievement on the fall to spring MAP scores and a more positive attitude with teaching.

# Null Hypothesis

Student achievement did not show a statistically significant increase for teachers attending monthly GLAD R&Rs and incorporating the strategies into their classroom

environment. In addition, the participating teachers showed no change in positive attitudes towards teaching.

## Results of the Study

In order to gauge the level of the study group's abilities, general experience, motivation level, and overall attitude towards teaching, it was important for the researcher to develop a baseline for analysis. The most direct method of achieving this objective was to find the average number of years the study group of teachers who attended GLAD R&Rs had taught. The answer was high with the average years of experience reaching over 25 years. Next, it was important to determine the interest in the study group towards the idea of GLAD training in order to see if material would effectively transition from R&Rs to the actual classroom or dismissed. Figure 4 shows the result. Out of the 15 teachers who responded to the post-survey, 33% of the teachers attended three out of the five GLAD R&Rs, 26% attended two trainings, 20% attended four and 20% attended five GLAD R&Rs.

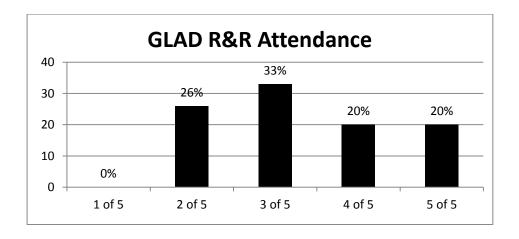


Figure 2. GLAD R&R attendance during the 2012-2013 school year.

A negative control group of sorts developed when it was discovered there were five teachers who did not attend any GLAD R&Rs throughout the entirety of the study. Those five teachers were later asked as to why they chose not to attend any of the R&Rs and their responses varied from maternity leave, to not enough time, and simple disinterest.

The researcher sent out a confidential pre- and post-survey survey in order to look at several factors to include: teacher comfort level with GLAD, opinion of positive/negative results, and how well the students received the type of instruction. The pre-survey asked how comfortable the study group was in using GLAD strategies in the classroom during the 2012-2013 school year, resulting in a 50% response of somewhat comfortable. When asked the same question on the post-survey, there was a slight increase to 60% feeling somewhat comfortable in using GLAD strategies. See figure 3.

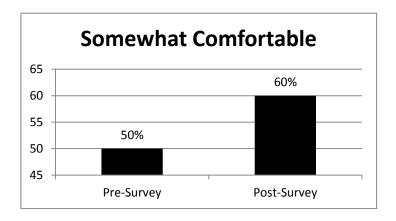
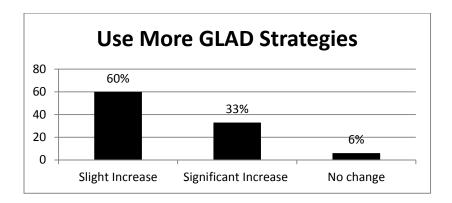


Figure 3. How comfortable the teachers felt with using GLAD strategies in their classrooms.

When asked on the post-survey how much more they used GLAD strategies after attending the GLAD R&Rs, 60% responded a slight increase with 33% saying a significant increase, followed by 6% stating there was no change. See figure 4.



*Figure 4*. Teacher responses showing how much more they use GLAD strategies in their classrooms.

When asked on the post-survey if they felt that implementing GLAD strategies into their classroom improved their instruction, 86% strongly agreed. While 53% believed that the GLAD R&Rs were extremely beneficial in their teaching, 26% believed it to be very beneficial and 20% thought the GLAD R&Rs were moderate in their teaching. See figure 5.

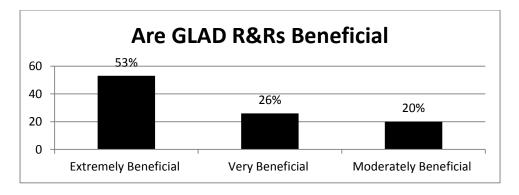


Figure 5. Teacher beliefs of how beneficial GLAD strategies are in their classrooms.

One question on the post-survey asked if they noticed a difference in student learning taking place with their students compared to their previous years of teaching. All teachers believed they noticed a change and many comments included student enthusiasm with GLAD and the use of higher level vocabulary.

The researcher conducted 13 voluntary interviews in March 2013 after five GLAD R&Rs were completed. When asked in the interviews, what made GLAD strategies enjoyable for them, the following comments were provided,

"A new way of looking at things; The kids get excited; The GLAD strategies sticks with them; The strategies lined up with college training; GLAD keeps kids engaged; Kids learn with visuals; GLAD energized my teaching; Invigorated/motivated/energized my teaching; GLAD fits with any content such as science or social studies; Repetition and visuals are how the kids learn best; It's easy; Covers all areas of sensory learning; The kids connect to the strategies; Visual; Visually engaging; Brain inputting is true with the strategies; Hands on for the kids; The kids get it (personal communication, March 2013)."

When asked if they used more, less or about the same amount of GLAD strategies since attending the GLAD R&Rs, eight said they used more and five said about the same.

During the interview, the researcher asked the teachers if they found the R&Rs to be beneficial in their teaching. All 13 teachers answered yes. When asked why they felt that way, they responded with the following comments,

"Energizing and makes me think of things in a new way; Focus time to teach 1 or 2 new strategies; Develop materials for the kids and use them every year; Excellent review; Time to collaborate with trainers and colleagues; New strategies not seen before; Time and resources were beneficial; Helped clarify misunderstandings from the initial GLAD training; Great refreshers; Able to talk to the trainers (personal communication, March 2013)."

The last question asked was if they noticed a difference in the learning taking place with their students. Ten teachers responded yes and three teachers were unsure. The researcher then asked for examples to show a difference in the student's learning. The answers were,

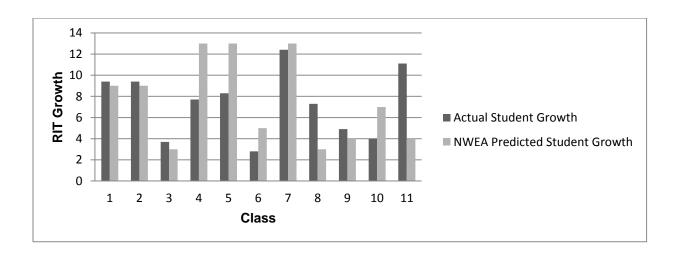
"More vocabulary use and willingness to share; Easier for review; Utilization of posters; Asked to take notes; Asked more questions; More team work; Reference to the walls (materials); More confident; More inquisitive; More connected with the units being taught (personal communication, March 2013)."

At the end of the interview, the researcher asked the teachers if they would show them the evidence they were using GLAD strategies in their classroom. The researcher had a walkthrough checklist of all GLAD strategies and indicated each observed item. There were 25 strategies on the checklist the researcher was specifically looking for. The mean of the number of strategies checked on the checklists from the 13 walkthroughs came to 5.5 strategies being used on a regular basis in each teacher's classroom.

The use of the GLAD workroom showed positive attitudes towards GLAD. The researcher found that from the month of October 2012 to March 2013, 14 teachers utilized the

GLAD workroom with a total of 68 times out of 98 calendar school days. Indicating 50% of teachers used the GLAD workroom 70% of the time.

The researcher compared 11 teacher's MAP scores from fall 2012 to spring 2013. The mean of each class's MAP scores was reviewed. The teachers not involved in the MAP score comparisons were teachers who do not have MAP scores available, such as special classes, special education, LAP/Title, bilingual, etc. Participation in GLAD R&Rs is defined as 2 attendances or more. NWEA had an average of each grade level and what average they should be from fall to spring, in addition to, the typical RIT gain for each grade level. Eight out of 11 classes showed an improvement in MAP scores. One class was less than a point away from meeting the NWEA's point growth. Two classes did not meet the typical RIT gain to show student growth. See Figure 6.



*Figure 6.* Actual student growth on the MAP test compared to NWEA predicted student growth.

In reviewing the MAP data and the student growth, the researcher wondered if the GLAD strategies and improved teacher attitudes helped raise the student achievement in MAP scores.

The null hypothesis was rejected. There were consistent gains in RIT scores showing there was a significant increase in student MAP scores by the study group of eleven classes. Eight out of the eleven classes showed an increase in MAP scores. The surveys, interviews, GLAD workroom sign-in, and the attendance of the GLAD R&Rs showed an increase in positive attitudes towards teaching and the GLAD program. The eleven classrooms improved their performance on the spring MAP and that improvement is statistically significant at p=.05, or in other words the difference was not due to chance. See Figure 7. However, it may not be due to the GLAD R&Rs as more research will be needed to ascertain the link.

t-Test: Paired Two Sample for Means

	SPRING	FALL
Mean	190.0090909	182.645455
Variance	440.1569091	521.658727
Observations	11	11
Pearson Correlation	0.993149525	
Hypothesized Mean Difference	0	
df	10	
t Stat	7.713586101	
P(T<=t) one-tail	8.09068E-06	
t Critical one-tail	1.812461123	
P(T<=t) two-tail	1.61814E-05	
t Critical two-tail	2.228138852	

Figure 7. t-Test: Paired Two Sample for Means.

## Findings

Many studies have quantified the influence of ongoing professional development as an important factor in improving teacher instruction (for discussions see Byrnes, 2009; Garet, Porter, Desimone, Birman, Yoon, 2001; Guskey, 1991). According to project GLAD, ongoing professional development is a must, primarily due to continually acquiring new knowledge about

academic content, learning strategies and utilizing ever changing technology. It was imperative for teachers to revise their instructional practices based on their newly acquired knowledge of GLAD strategies.

The results indicated GLAD R&Rs, in fact, boosted teachers' attitudes in a positive direction towards teaching. With the increased positive attitudes, teachers taught with more energy, focus, and passion. The researcher wonders in the positive attitudes toward teaching may have played a role in the increase of student MAP scores observed in the spring of 2013.

## **Discussion**

Although the study did show a positive impact on teachers' attitudes and student achievement, it could be argued the teachers who participated in the study were the very same teachers who continually improve themselves and the way they teach with or without utilizing new techniques like GLAD. It could also be said that those teachers who attended the trainings are more receptive to professional development and implementation.

#### Summary

It appears that the teachers who participated in the GLAD R&Rs had or developed positive attitudes toward GLAD strategies and teaching in general. Armed with new skills or utilizing this refresher of GLAD strategies, the positive attitudes achieved towards teaching caused a direct impact in the increase of student MAP scores in the spring.

#### CHAPTER 5

### Summary, Conclusions and Recommendations

### Introduction

The school district needed to make some aggressive changes moving towards their objective of achieving higher scholastic achievement. They decided to accomplish this goal by understanding what the current industry standards or best practices were, and then develop an implementation plan. One of the more successful models they uncovered and decided to try were the strategies found in GLAD. Teachers were able to utilize the program as a tool that helped improve their instruction and student performance. GLAD has been proven to help other districts, for example districts in Orange County, California, improve their student achievement. "Teachers need to acquire new knowledge and skills and develop them continuously..."

(Alimehmeti, M. and Danglli, L., 2013, p. 16) By developing an appropriate and effective implementation plan for each state, region, and district, the deployment of the GLAD strategies greatly improved the education systems primary goal of teaching and shaping the next generation to be better than the previous one. To be successful, the district must constantly strive to evolve and grow to new heights.

## **Summary**

The school district's Hispanic population was slowly increasing. More students were being enrolled in the ELL program due to the increase. Guided Language Acquisition Design was a program that used chants, 10/2s, sentence patterning charts, teacher made big books and vocabulary inputs that assisted ELL students to be successful in the classroom.

The purpose of the study was to explore if monthly GLAD trainings would improve teacher's attitudes of teaching and student achievement. The analysis of the data through interviews, questionnaires, surveys, and MAP scores was used to determine if a positive outcome was ultimately achieved.

### Conclusions

Based on the interviews, walkthroughs, and surveys, the research suggests that the GLAD R&Rs was a contributing variable in teacher's self-confidence, energy, and positively impacted their individual classrooms, thus resulting on an increase in student achievement. The researcher noticed that some GLAD strategies taught during the GLAD R&Rs were not always used when the teachers went back to the classroom, such as team points and chants. However, during the interviews and walkthroughs, 11 out of the 13 teachers commented that they did try new strategies they had not tried before the GLAD R&Rs. The GLAD R&Rs gave teachers the confidence to try new reading strategies. It had been shown in selected districts that GLAD is a program with good reading and writing strategies, when implemented with fidelity that it does have a positive impact on student achievement.

#### Recommendations

Based on time constraints, scheduling, reduced GLAD trainings, and one year of MAP data, the researcher's recommendations are to continue the GLAD R&Rs for the next several years and continue to gather data, such as yearly MAP scores, GLAD R&R attendance, teacher surveys, and classroom walkthroughs for analysis. The researcher suggests future research that tests for statistical significance be conducted. With the increase in available information and more time to assimilate other teachers into the GLAD R&Rs who did not participate during the

2012-2013 school year, the positive impact the program may be clearly visible and easy to understand. GLAD may make a difference in teacher's attitudes of teaching and it appears to contribute to student achievement. Therefore, if using a conservative comparison to other schools that utilize GLAD strategies, it may be possible the district could meet AMOs in each subgroup by 2017.

#### References

- Alimehmeti, M. and Danglli, L. (2013), Criteria Related to Processes of Teachers' Successful Professional Development and Qualification Improvement. Problems of Education in the 21st Century, Volume 51.
- Anonymous. (December 2010). Key Points in Learning Forward's Definition of Professional Development. *Journal of Staff Development*, Vol. 31 No. 6, 16-17.
- Baker, D.B., Gratama, C.A, Peterson, K., & Thompson, C. (2012). Retrieved from <a href="http://www.bercgroup.com/star-protocol-report.html">http://www.bercgroup.com/star-protocol-report.html</a>.
- Brechtel, M. (2001). Bringing It All Together. Parsippany, NJ: Pearson Education, Inc.
- Buffum, Mattos and Weber (2009), Pyramid Response to Intervention, RTI, Professional Learning Communities, and How to Respond When Kids Don't Learn. Bloomington, IN: Solution Tree Press. 78.
- Byrnes, K. (2009). Investigating teacher attitudes about action research as a professional development tool.
- Collins, P. (Winter 2008). Using Poetry throughout the Curriculum. Kappa Delta Pi Record. 44.2: 81-84.
- Dietel, R. J., Herman, J. L. & Wolf, M. (Spring 2010). Improving the validity of English language learner assessment systems. National Center for Research on Evaluation, Standards, & Student Testing. CRESST Policy Brief 10. p. 1-5.
- Edmiston, A. (November, 2008). A year of personal guidance. American Psychological Association. Vol 39, No. 10. Retrieved from <a href="https://www.apa.org/monitor/2008/11/catalyst.aspx">www.apa.org/monitor/2008/11/catalyst.aspx</a>
- Education Northwest. (2012). Retrieved from http://projectgladstudy.educationnorthwest.org/what-is-glad
- Garet, M, Porter, A, Desimone, L, Birman, B, Yoon, K. (Winter 2001): What makes professional development effective? Results from a national sample of teachers. <u>American Educational Research Journal</u> 38. 4 915.
- Gay, Mills, and Airasian . (2012). Educational Research: Competencies for Analysis and Applications, Tenth Edition. One Lake Street, upper Saddle River, NJ: Pearson Education, Inc. 484.

- Guskey, T. (1991). Enhancing the Effectiveness of Professional Development Programs. *Journal of Educational and Psychological Consultation*, 2(3), 239-247.
- Guskey, T. (June 2003). What makes professional development effective? *Phi Delta Kappan* 84.10 748-750.
- Hadaway, N., Vardell, S., & Young, T., (May 2001). Scoffolding oral language development through poetry for students learning Enlish. The Reading Teacher. 54.8.
- Hansen, L. (Jan 2006), "Science in Any Language", Science and Children. 22-25.
- Hansen, L. (Nov/Dec 2003), "Science in Any Language", Science and Children. 36.
- Hattie, J. (October, 2003). Distinguishing Expert Teachers from Novice and Experienced Teachers. Teachers Make a Difference, What is the Research Evidence? 1-2.
- Hirsh, S. and Sparks, D. (May 2000) Education Week, Vol. 19 Issue 37, p. 42.
- Johnson, D, Johnson, R., and Smith, K. (July/August 1998). Cooperative learning returns to college. *Change*, 31.
- Laufer, B. (July 2009). Second language vocabulary acquisition from language input and from form-focused activities. *Language Teaching*. P. 341-354. Cambridge, UK: Cambridge University Press.
- Learning Forward. (2012). Retrieved from <u>learningforward.org</u>.
- Lutnpe, A., and Chambers, E. (2001). Assessing Teachers' Context Beliefs about Technology Use. 93.
- Marzano, R. (2007). The Art and Science of Teaching. Alexandria, VA: Association for Supervision and Currriculum Development (ASCD). 39-44.
- Marzano, R., Pickering, D., and Pollock, J. (2001). Classroom Instruction that Works. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD). 91, 111.
- Medina, J. (2008). Brain Rules. Seattle, WA: Pear Press. 74.
- Project GLAD National Training Center. (2012). Retrieved from www.projectglad.com.
- Reeves, D. (2010) Transforming Professional Development into Student Results. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD), 15.

- Sanders, W. and Horn, S. (1998). Research Findings from the Tennessee Value-Added Assessment System (TVAAS) Database: Implications for Educational Evaluation and Research Journal of Personnel Evaluation in Education. 12:3 247-256,
- State of Washington Office of Superintendent of Public Instruction (OSPI). (2012). Retrieved from (http://www.k12.wa.us/).
- Walker, Ph. D., A., Shafer, Ph.D., J. & Liams, Ph.D., M. (2004). "Not In My Classroom": Teacher Attitudes Towards English Language Learners in the Mainstream Classroom. *NABE Journal of Research and Practice*, 2:1Winter.

# Appendix

# Post-Survey

	or the following item, check the choice that best describes you. How many years have you teaching?
0	1-5
0	6-10
0	11-15
0	16-20
0	21-25
0	more than 25
	ow many GLAD R&Rs have you attended in the 2012-2013 school year?
0	0
0	1
0	2
0	3
Ο.	4
0	5
	you were unable to attend any GLAD R&Rs, what were the reasons? Please check all that
apply	
	Not interested
_	Too busy
	Conflicts with Tuesdays
	Coaching
	Have not implemented GLAD into my classroom
	Time not conducive for schedule
	I attended all GLAD R&Rs
Othe	er (please specify)

4. With attending the GLAD R&Rs, how comfortable are you in using GLAD strategies in the classroom this year?			
0	Very comfortable		
0	Somewhat comfortable		
0	Neutral		
0	Somewhat uncomfortable		
0	Very uncomfortable		
0	I have not attended any GLAD R&Rs		
5. Implementing GLAD strategies into your classroom improved your instruction.			
0	Strongly agree		
0	Moderately agree		
0	Neutral		
0	Moderately disagree		
0	Strongly disagree		
6. Since attending the monthly GLAD R&Rs, how much MORE do you use GLAD strategethis year?			
0	A significant increase		
0	A slight increase		
0	No change		
0	I did not attend any GLAD R&Rs		

7. V	What NEW strategies have you tried since attending the GLAD R&Rs? Please check all that lv.		
	Cognitive Content Dictionary (CCD)		
	Observation charts		
	Inquiry charts		
	Teacher made big books		
	Scout awards		
	Graphic organizers (mind map, Venn diagram, world map, etc.)		
	Comparative input (compare & contrast)		
	Pictorial input chart		
	Narrative input chart		
	10:2 (instruction 10 minutes, student discusses 2 minutes)		
	T-graph for social skills		
	Team points		
	Exploration report		
	Chants		
	Sentence patterning charts		
	Team tasks		
	Expert groups		
	Process grids		
	Co-op strip paragraphs		
	Story maps		
	Found poetry		
	Interactive Journals		
	Learning logs		
	ELD questions		
	None		
	I did not attend any GLAD R&Rs		
Oth	Other (please specify)		

8. How beneficial are the GLAD R&Rs in your teaching?			
0	Extremely beneficial		
0	Very beneficial		
	Moderate		
0	Not very beneficial		

- 9. Have you noticed a difference in the learning taking place with your students? Please explain.
- 10. Please write any additional comments about how you believe the GLAD R&Rs went this year in the box provided.