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## Investigating the Impacts of a Collaborative Language Teacher Professional Development

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### Abstract

This research investigates teacher implementation of the Guided Language Acquisition Design (GLAD) model over time and after teachers received a unique combination of additional GLAD training, coaching, and collaboration. Teachers who took part in this in this study had previously received an initial full-week, intensive GLAD training; however, they struggled to implement GLAD accurately. This study, therefore, investigates the effects of implementing a new model of supplemental professional learning for teaching GLAD within an existing three-week summer school program. Teams of teachers instructed English Learners in the morning and then had planning, reflection, and professional development time each afternoon. Although this experience was designed to both teach teachers about GLAD and instruct students, this particular research study focuses on the experience of the teachers. This two-part qualitative research study includes observations and interviews during the summer, in addition to follow-up interviews during the school year to investigate the sustainability of the experience. Results suggest that the overall effects of participation are positive; however, the effects are largely individualized, depending on the participant's expectation of the experience and characteristics of their specific collaborative team. Recommendations for improving the sustainability of the approach are also provided.

**Keywords:** English Learners, GLAD, Integrated Literacy, Pedagogy, In-service Teacher Preparation

## **Introduction**

Gaining in popularity in recent years, Guided Language Acquisition Design, or GLAD, is a curricular method for supporting the growing number of Emergent Bilinguals (EBs) in the United States to learn both grade-level content and a new language (e.g., English). “GLAD is an instructional model with clear, practical strategies promoting effective interactions between students and students, and teachers and students, that develop metacognitive use of high-level language and literacy” (Project GLAD, 2015, para. 3). This K-12 instructional model is a form of content and language integrated learning (CLIL) that is designed to benefit all learners, but especially EBs. Teachers use 35 instructional strategies in the framework to promote English language acquisition, academic achievement, and cross-cultural skills. These strategies are categorized into four target areas, including focus/motivation, input, guided oral practice, and reading/writing; examples are provided in Table 1 (Project GLAD, 2015). However, GLAD is not a scripted curriculum that can be purchased; implementing GLAD involves creating or adapting instructional units that target the needs of each individual school or district. This model is one of its hallmarks – it is designed by and for teachers and units are designed by the teachers within the local context and having the interests of students in mind. Unit frameworks involve the use of multiple GLAD strategies and must emphasize CLIL. The units must be designed to integrate content and language, typically integrating social studies and science standards with literacy and language (see <https://begladtraining.com/about> for more information).

## **Limited Research on GLAD**

The research on GLAD is quite limited despite its rise in popularity. However, findings from prior research are largely positive, including an acceleration of English language development, gains in reading achievement, increases in receptive vocabulary, and increased engagement, participation, learning, retention, and teamwork (Cawthon, 2005; Deussen et al., 2014b; Hahn, 2009; Lucas & Mackin, 2012; Project GLAD, 2015).

Implementing GLAD effectively is no easy feat, likely due to the complexity of the GLAD framework and the associated plethora of strategies. Learning just the basics of GLAD requires extensive professional development: six to seven full days of training, including an introductory two-day workshop and a follow-up four or five-day demonstration training in which the trainees watch the strategies enacted in a real classroom (Orange County Department of Education, 2011; Project GLAD, 2015). Although participating in this intensive training results in changes to classroom instruction in the year following GLAD training (Lucas & Mackin, 2012), research shows teachers implement the strategies to varying degrees (i.e., many only implemented GLAD strategies about half the time). Further, it seems teachers use the reading and writing strategies specifically less often than anticipated (Deussen, Nelsestuen, & Autio, 2014a; Peterson, 2014). It also appears that implementation dwindles over time; for example, the study conducted by Lucas and Mackin (2012) shows that 85% of teachers implemented multiple GLAD strategies in the first year after training, while only 47% of teachers implemented them in the second year after training.

**Table 1. GLAD Strategies.** (Project GLAD, 2015; Spokane Public Schools, 2013)

Target area	Purpose	Strategies
Focus / Motivation	Build background knowledge, motivate students, activate prior knowledge, enhance academic language	<ul style="list-style-type: none"> <li>·Super scientist awards</li> <li>·Cognitive content dictionary</li> <li>·Observation charts</li> <li>·Inquiry charts</li> <li>·Big books</li> </ul>
Input	Make complex cognitive concepts understandable for students at all proficiency levels	<ul style="list-style-type: none"> <li>·Comparative input charts</li> <li>·Narrative input</li> <li>·Graphic organizers</li> <li>·Pictorial input</li> </ul>
Guided oral practice	Incorporate output strategies that target developing academic vocabulary and language	<ul style="list-style-type: none"> <li>·Extended name tag</li> <li>·Exploration report</li> <li>·Picture file cards / Word bank</li> <li>·Team points</li> <li>·Poetry / Chants</li> <li>·Sentence patterning chart</li> </ul>
Reading / Writing	Utilize reading and writing practice through teacher modeling, sharing, student collaboration, guided learning, and independent learning	<ul style="list-style-type: none"> <li>·Expert groups</li> <li>·Team tasks</li> <li>·Process grid</li> <li>·Mind map</li> <li>·Story map</li> <li>·Portfolios</li> <li>·Interactive journals</li> <li>·Writer's workshop</li> </ul>

These findings suggest that additional follow-up training and support are needed for implementing GLAD. However, prior to the study conducted and discussed here, it was unclear what exactly this additional training, coaching, and collaboration might look like. This research sought to fill this gap by investigating one district's effort to integrate an extended professional learning experience centered around GLAD into an existing district summer school program. In this experience, teams of four teachers collaboratively utilized GLAD in classes of EB students during the summer school. The teams taught integrated content and language GLAD units to the EB students for three hours each morning, four days a week, for three weeks during summer. In the morning sessions, the teams of teachers practiced and observed each other implementing GLAD, and then they had planning, reflection, and professional development time for two hours each afternoon to further their learning of GLAD. In addition to learning more about GLAD through practice, observation, and professional development, the teams piloted GLAD units and revised the units and lesson plans following each day of instruction. The intention was to then implement these GLAD units district-wide in the school year. Designing this professional development experience drew on models from the literature, such as the Japanese model of Lesson Study, which involves collaboration in lesson planning and peer feedback (Lewis, 2000). However, the GLAD teacher professional development experience is unique in its intentional time-frame that integrates teacher learning and a summer school for students. Additionally, GLAD allows teachers to apply learned instructional knowledge in real-life contexts, which is supported by Borg's (2003) theory of teacher cognition. This research contributes to the dearth of empirical research on GLAD, providing insight about GLAD implementation across and beyond an extended learning experience through a triangulated approach.

## **Research Question**

This qualitative research study utilized observations, artifacts, and interviews to investigate the following research question:

*What is the impact of participating in the extended professional learning experience on teacher implementation of GLAD?*

## **Theoretical Framework**

The primary theoretical framework for this study was teacher cognition, which Borg (2003) defined as “unobservable cognitive dimension of teaching – what teachers know, believe, and think” (p. 81). Research on teacher cognition shows teachers draw on prior knowledge and prior experiences when making instructional decisions in the classroom. This summer experience attempted to add to the base of teachers' prior knowledge and help them gain experience to recount in the future and when teaching integrated content and language to EBs.

## **Method**

### **Participants**

Twenty-four teachers from one school district in the Pacific Northwest of the United States participated in this research. The district was diverse: 45% of the students in the district were identified as EBs and over 40 different languages were spoken by students in the district. Each of the six teacher teams taught a different GLAD unit to a different grade level. The years of teaching experience ranged from 1 to 25 ( $M= 8.63, SD = 6.89$ ). All of the teachers had previously received the full, week-long, intensive GLAD professional development experience, and implemented GLAD for at least one year; however, prior to the summer experience, teachers had constantly reported that they had been struggling with implementing GLAD and failing to see how the different strategies fit together to form a unified framework. These reports in fact led to the creation of this professional learning experience.

### **Data Collection Procedures**

Data for this qualitative study were collected in two phases. The first phase was in summer, wherein the 24 teacher participants taught students four days a week for three weeks for a total of 12 sessions. These sessions were observed every other day for a total of six sessions. Each classroom was observed during each of the 6 sessions for approximately 30 minutes – a total of three hours of observation per classroom and 18 hours of observation in total. Observations were conducted using a protocol designed to capture key information about GLAD strategies being used, the accuracy of implementation of those GLAD strategies, and the ways in which the teachers on the team collaborated with each other. Observations began each day in a different classroom to ensure coverage of different components of the schedule within each classroom. Observations were also made during the afternoon planning, reflection, and professional development time. Field notes were taken that detailed participants' learning of the principles of GLAD and their success in teaching the EB students. In addition, in-the-moment informal interviews were conducted with teacher participants throughout the three weeks to better understand teacher learning, student learning, and GLAD. Artifacts such as student work, pictures, and videos were also collected and examined to determine the accuracy of the GLAD strategies; these various data sources (i.e., observation, interview, and artifact collection) provided a multi-instrument approach, or triangulation.

During the subsequent school year, data were collected to investigate the long-term cognition of the teachers after participating in the summer experience. During this phase, follow-up interviews (about 30 minutes each) were conducted with 21 of the 24 teacher participants to investigate how the summer experience had impacted their teaching of GLAD. These interviews were conducted at two different time periods to better understand long-term change: three and seven-months post the experience. Questions for the interviews were constructed partially from the principles of GLAD instructional concepts and the domains and subdomains of each concept were delineated after reviewing the relevant literature.

Institutional Review Board (IRB) approval was procured for all aspects of this study, and informed consent was obtained from all participants.

### **Data Analysis**

Although all interviews were semi-structured and evolved based on participant responses, a starting interview protocol was used for both phases of the study. These interview protocols went through multiple rounds of review, revise, and pilot prior to implementation. The data were analyzed using a constant comparative approach, rooted in grounded theory of dominant themes that emerged. Transcripts of the qualitative data were analyzed in detail, and initial or open coding was used to classify data. Data collected through observations and artifact collection were used to corroborate themes and patterns that arose through the interviews. Multiple researchers collaborated to determine the most relevant themes to apply to the data analysis.

## **Findings**

This qualitative research study utilized observations, artifacts, and interviews to investigate the impact of participating in the extended professional learning experience on GLAD implementation. Data analysis revealed largely positive changes in GLAD implementation; however, these changes were mediated by the expectations of the individual participants and the characteristics of the collaborative teams.

### **Positive Changes in GLAD Implementation**

It appears this professional learning experience changed teachers' GLAD implementation, both in short and long-term. For example, one teacher said:

For me, there were some strategies that I had hit a wall with [prior to the summer experience] and didn't know how to do, and getting to see other people who were better at some strategies than I was, and vice versa, getting to see how they did it, really helped me.

Some of the teachers had given up on using certain strategies, yet after observing others implement these same strategies successfully during the summer, they had an epiphany about how to implement the strategy themselves. These changes in practice were observed firsthand, and GLAD implementation improvement was also mentioned repeatedly in both in-the-moment and follow-up interviews. For example, one teacher said,

The experience gave me an opportunity to see pieces that I hadn't seen before, and it gave me the opportunity to see pieces taught correctly. And then be able to go back and into the units like, having that time to go back and say, oh this is really what we were trying to do with, like, the writing mini lessons, this is the connection we were supposed to be making?

Teachers also described how they felt the experience of implementing GLAD in a guided setting was actually necessary for them to be able to implement GLAD accurately:

I felt like the summer really actually did the training needed ... so I can actually feel like I'm prepared and even have a way to even go about doing GLAD units. Whereas before, I tried my best, but I feel like I didn't do it justice whatsoever. But now it's like I've actually been through the entire process, so I have that confidence behind me and the experience, and the great thing about it too was that I was able to ask questions too.

One teacher said her teaching practice has changed since the summer experience: “I have started to incorporate a lot more strategies. Just because I’ve done them and I’ve seen them and I know what they’re like.” Novice participating teachers especially revealed these new understandings, recognizing how powerful GLAD could be when done well and when the teacher understood all of its aspects. This evolution of teacher understanding of the framework moved them from cautious bystander to active advocate for GLAD.

As teachers had more opportunities to practice teaching GLAD in the guided setting, many teachers described how their confidence improved and that this newfound confidence caused an increase in the use of GLAD strategies in the subsequent year. One teacher shared, “I feel like I learned a lot about how everything fits together in GLAD. I knew some of the strategies, but I didn’t see how they were interconnected until doing them with people watching and talking about it.” Another agreed, saying, “I have noticed that I am starting to understand the inter-connectedness of all the strategies. Seeing how they complement and inform one another, like Input à Mind Map à Process Grid or Expert Group à Mind map à Process grid à Game.” Teachers emphasized several specific GLAD strategies that improved over the course of the three weeks. For example, one participant stated, “This experience has helped us develop our understanding of Cognitive Content Dictionary, Narrative Input, Pictorial Input as it relates to Process Grid, Expert Groups and Picture File, and Graphic Organizer.” Another teacher discussed his growth in understanding of Team Tasks:

I’m glad we went through the whole Team Tasks, I’ve never done that, and I’ve always poo-poo’d it, I’ve always concluded ‘how come kids want to copy, it’s so boring’ so I always make complicated things for the kids to do but they were right on with it, they were excited to do it, and it let us do what we needed to do while they were doing their Team Tasks, so I’m kind of sold on it now, and I’ll sell it to everybody else.

This extended opportunity to use GLAD in the classes with the actual language learners also helped teacher participants grasp an understanding of GLAD as a whole model (i.e., CLIL) for teaching content and language acquisition to all students, but especially targeting EB students. In addition, because GLAD is designed to be integrated literacy with content like social studies and science, an increase in time spent with GLAD in the classroom also had a side effect of teachers reporting teaching more science and social studies than they ever had before. For example, one teacher said, “Last year I wasn’t doing as much social studies as I am now, so it’s definitely transformed the last part of my day. I mean now I’m really implementing GLAD, whereas last year, I was floundering.” Overall, it appeared that facilitating more opportunities for teachers to observe GLAD implementation in a real classroom firsthand and to try new pedagogies in a low-stakes environment with immediate feedback truly improved their short-term and long-term fidelity and practice.

### **Expectations of the Experience Impacted Learning**

Although feedback from participants was overwhelmingly positive, the degree to which participants benefited from the learning experience varied based on prior expectations. It appeared that expectations at the beginning of the experience predicted the impact: educators that came into the experience with more of an open mind, with a desire to learn, willingness to

be observed, and improve their own teaching experienced the largest changes in practice. Certain individuals in particular seemed to flourish because of the additional GLAD experience, not only demonstrating large changes in GLAD implementation and cognition, but also assuming more of a GLAD teacher-leader role in the year following. Teachers who gained the most from the experience were the same teachers who had expressed their interest in learning on the first day; teachers who initially said things like, “I expect lots of support, stretching, and practice! I expect to put myself out there and try new strategies with the support of my team” and, “I want to learn and get feedback on my teaching.” These teachers were also subsequently observed leading conversations and professional development sessions in the afternoons, collecting and analyzing student data, and using data to lead conversations. They videotaped themselves as a way to both grow and to show colleagues back at their home school.

This teacher-leader role failed to materialize for all participants, however. Teachers who were nervous about being evaluated or judged by their peers or authority figures at the beginning of the experience were less likely to report growth. Post feedback reflected that some of these original fears persisted, as one participant reported:

Watching each other, again, I didn't feel comfortable. I'm not there yet. I'm still practicing myself and learning. And to be all, kind of like, take that spotlight. I was like, oh, I'm not fully confident here. Give me a minute, just to process everything. So that part was a little stressful.

Teacher participants who were less open to feedback, whether it was critical or constructive, felt stress during the collaborative professional development experience. Feedback from these teachers revealed a lack in changes to both thinking and practice. The outlook of the adult learner prior to the experience seemed to impact the efficacy of the experience for educators, and perhaps these individuals would have felt more comfortable in more of an observer role.

### **Team Characteristics Impacted Learning**

Team cohesiveness also seemed to be an important factor impacting the gains experienced by participants in the summer experience. In terms of the collaborative cohesiveness, some individuals found themselves working with teachers with whom they had prior relationships. This familiarity sometimes helped – fostering trust – and sometimes hindered – causing the individuals to report feeling “anxious when being observed/evaluated.” In follow-up interviews, participants were split in how they thought the experience should be executed in future renditions. Some felt the experience should continue as-is, having teams consist of a mix of teachers from different schools, in which they can “broaden their horizons” about how other teachers in other schools are implementing GLAD. Others thought having whole teams from schools participating would have better facilitated GLAD implementation at a school-level. Further, several participants attributed their learning or lack of learning to having a GLAD expert, or someone with a lot of experience teaching GLAD, on their team. While all teams officially had a “GLAD expert” per se, the level of knowledge, expertise, and familiarity with the program varied, from being an official GLAD trainer to an enthusiastic GLAD teacher with one year of experience teaching GLAD. This variability impacted the amount of learning that occurred, with participants describing increased learning when they had what they would consider a “true expert” on their team to turn to with questions and for advice.

The observations synced with these data – teams worked together in different ways with different results. In a few teams, including the second grade team especially, all teachers taught all components of each lesson. Teaching ranged from a true co-teaching arrangement to, more often, a one-teach-others-assist model, in which the lead teacher constantly switched. In other teams, one or two of the teachers taught the students, while the remaining team members were engaged in other activities, such as preparing materials, assessing students, or working at computers, sometimes within the classroom and sometimes outside the classroom. Although utilizing various co-teaching models brought their own inherent difficulties, the teachers most actively participating and seen co-teaching the most were also observed and perceived as growing the most in terms of cognition. The second-grade group described above were examples of this. In contrast, in third grade, one teacher taught most of the time while the other team members were observing, assisting, or preparing materials. Thus, although those observing teachers gained knowledge through observation, they got little hands-on experience and therefore still felt a bit lost when they returned to their home classrooms. Increased clarity around the roles of all team members and the expectations of the experience may have increased the outcomes for all.

## Discussion

These results have several important implications that warrant discussion. It appears that this method of professional learning may have direct impacts on teacher GLAD knowledge and cognition, which is one of the major goals of effective professional development (i.e., Hill, Rowan, & Ball, 2005; Little, 2006). Observations and interviews alike revealed that GLAD implementation improved dramatically over the three weeks of the summer school session and was sustained across the following school year as well. It is clear from both the literature (i.e., Deussen et al., 2014b; Lucas & Mackin, 2012; Peterson, 2014) and the experiences of these participants that teachers may not be ready to implement GLAD successfully and accurately after the initial GLAD training. This professional learning model could be one way to provide the needed follow-up training. The extensive hours of professional learning and application within the model (i.e., approximately 60 hours across three weeks) are supported by literature on effective professional learning opportunities. Yoon et al. (2007), for example, realized that teachers who received an average of 49 hours of professional learning in one year increased their students' achievement by about 21 percentile points. Future research on the effects of providing this additional training, collaboration, and coaching experience could entail a measurement of student achievement gains in classrooms of participating teachers.

Further, many of these participants lacked confidence in their GLAD abilities following the initial training and hoped the training would provide familiarity and increase their confidence when implementing GLAD. The follow-up interviews revealed that participation increased teacher knowledge of GLAD and developed their confidence in implementing it. Given that confidence in teaching the strategies is related to implementation of the strategies (Peterson, 2014), it is likely that participating teachers are implementing at much higher rates than in the previous year. Participants emphasized the value in the opportunity to observe the implementation of a whole GLAD unit from its beginning to its end, so that they could notice how all of the different strategies fit together. In addition, teachers appreciated how the professional development experience allowed them a view into the *why* behind certain GLAD

strategies, which contributed to sustainable learning. The data showed that this professional learning experience contributed to teachers' cognition – to what they think, know, and believe (Borg, 2003). For instance, teachers spoke about sharing the news with others, about feeling empowered to implement new strategies, and about the desire to replicate the experience in the future. One teacher said:

I thought it was extremely exciting because the team that I worked with kept saying things like, 'I thought I knew that strategy before but I never understood the point and now I get it and I'm going to tell people I work with why it's worthwhile.'

Like anything, though, this was no 'magic bullet'; some teachers still did not feel prepared to implement GLAD even after the extra training.

### **Sustainability Issues of this Model**

While it appears this model has great potential to impact participants, there are some questions about sustainability of this model in the long-term. Only 24 teachers across this district participated in the professional development experience. Following the summer experience, for example, participants were both excited and concerned about transferring knowledge back into their home schools and classrooms. While the district had newly empowered teacher leaders and new GLAD experts, harnessing their strength had to be considered strategically. Several of the participants voiced excitement at this prospect: "Now we have all these teacher leaders that you know, have participated, who can bring their strengths back to their schools and to their grade level teams." Another teacher said, "I'm excited to tell the teachers, like this is what I learned." At the same time, however, the participants felt disconnected from teachers at their home school who had not participated in the experience: "We can't really talk in-depth because we don't really speak the same GLAD language ... I feel like I know more, but being able to actually implement it with my team has been a little more difficult." Yet another teacher voiced a similar frustration: "I feel like I have a much better understanding of GLAD strategies because of the summer program. But at the same time, I'm working with co-workers and teammates who don't have that deeper understanding and have different ideas."

At the same time, teachers noticed a disconnect between the "luxurious teaching conditions" experienced in the summer and the realities in their own classrooms:

I saw something worked so well because we had 15 kids and we had four teachers, so now coming back to school where we have classes of 30 [and one teacher] ... the reality there versus the summer reality versus the true reality is totally different.

Although clear changes in practice and knowledge occurred because of the additional training, coaching, and collaboration, the sustainability of the learning beyond that first year was questionable. It appears necessary, if maximum impact is desired, for a district to prepare an explicit plan to harness the potential for sustainability of such learning. How can all teachers in this district gain access to this learning experience so they can all "be on the same page"? Professional development is more effective when it is integrated into the master schedule as an official plan (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009).

## **Limitations and Future Research**

There were several limitations in this study that might be addressed in future research. For instance, this research was only conducted in one district in the Pacific Northwest and is only one model for follow-up GLAD learning. Teachers had varying amounts of experience with both GLAD and working with EBs, and this certainly may have impacted the outcomes of the study. Future research might investigate various forms of this model. For instance, this experience might be attempted during the school year versus the summer and teams could be actual grade level teams in a school, working with their own classrooms of students. Many participants suggested school-year embedded experiences for smoother transitions, sustainability, and for heterogeneous student grouping. Having an expert GLAD coach in the schools could also help with sustainability. Furthermore, this was a qualitative study, so it did not measure cause and effect or investigate student learning impacts by either participating in the summer school or by being in a participating teacher's classroom in the subsequent year. Finally, the impact on student learning should be investigated in future research through using a Non-native English Speakers (NNES) lens (Mahboob, 2010) to focus on the diverse needs of EBs to help provide a more balanced view of the multilinguistic, multiethnic, and multicultural experiences and needs of EB students.

## **Conclusion**

Implementing GLAD is potentially one answer to improving how we meet the needs of a growing population of EB students in schools. However, GLAD and its use of 35 different strategies can be difficult to learn and implement accurately. The purpose of this study was to explore the impacts on teachers of a collaborative, extended professional development opportunity. This research highlights one new, unique method of providing hands-on, team-based learning experiences for educators through an existing summer school program. The results support prior research (i.e., Lewis, 2000; Wei et al., 2009) on the benefits of collaborative teacher learning models, yet this innovative approach offered additional elements that could enhance teacher learning experiences. It appears that teachers believed that an extended, hands-on, supplemental learning experience was not only desired but also necessary, and it provided educators with the supports they needed to be successful in implementing GLAD and better supporting their EB students. As one teacher said: "This experience has been critical to my understanding of how to use GLAD in a classroom. I have had the opportunity to see multiple strategies modeled and then [was] able to practice with the kids – the experience was super instrumental in my comprehension of all the strategies."

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