EVALUATION OF THE FINAL YEAR (2009–2010) OF THE ARTS AND LITERACY FOR ALL PROJECT

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EXECUTIVE SUMMARY

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BACKGROUND AND METHODS

An evaluation team at Curriculum Research & Development Group has completed the final annual evaluation of Arts and Literacy for All (ALA), a four-year project of the Hawai‘i Arts Alliance funded by the Arts in Education Model Development and Dissemination (AEMDD) program of the U. S. Department of Education. ALA followed a three-year AEMDD grant that had shown wide acceptance by the participating teachers and had yielded tentatively positive results about the effects of the project on students' achievement, attitudes toward school, and interest in some of the arts but had shown lower levels of teachers' implementation of the project than desirable.

ALA taught teachers in four O‘ahu elementary schools how to use "arts strategies" that drew on drama and dance techniques for the intended purposes of improving students' reading achievement, engaging students in learning and increasing their interest in the arts, and changing participating teachers' pedagogical practices. The ALA project team provided professional development to the teachers in the form of summer institutes, follow-up training days, and one-on-one teacher mentoring by trained arts educators—a model consistent with the recommendations of professional development experts.

In Year 1 of the project (School Year 2006–2007) , the Alliance's ALA team and the evaluators prepared for implementing and evaluating the remaining years of the project. The evaluation plans continued to evolve during Years 2–4. The evaluation in Years 2 and 3 used a quasi-experimental design. The participating teachers and students reported positive perceptions of the project in both of those years. Furthermore, the evaluation results in Year 3 showed that the longer that teachers' had been in the program, the more they used the strategies. The results also showed that the more professional development that the teachers had received, the more they found the strategies useful. However, in both Years 2 and 3, a number of teachers were skeptical about the potential of the arts strategies to change students' reading achievement, and differences among the students' reading achievement scores were not related to the teachers' length of project participation or to the frequency of their use of the arts strategies. These findings followed the *tentatively positive* effects of the project on student achievement and attitudes that had been found in the first AEMDD grant. The lack of strong effects in that grant and of positive effects on achievement in the ALA grant led the evaluation team to recommend (with the agreement of the ALA project team) to drop the quasi-experimental design in Year 4 (2009–2010)—the year covered by this report—and replace it with case studies of a sample of high performing teachers, with the intent to describe cases of successful implementation and potentially successful outcomes. This approach, coupled with a questionnaire to be administered to all 74 teachers who had participated and remained at their schools during the four years of the project, was intended to take a deep look at ALA and to yield potentially helpful recommendations for future implementations of the project.

Toward these ends, we identified seven teachers who agreed to participate in the case study for extra compensation. The teachers kept weekly logs throughout the second half of the 2009–2010 school year,

completed a questionnaire (along with all other ALA teachers) about their perceptions and use of the ALA strategies, were interviewed in depth by an experienced educator, and were observed and rated an average of 2.14 times each by a minimum of three observers. These methods were complemented by administering reading achievement tests to the students of the case study teachers and to groups of comparison students immediately after the seven case study teachers used the strategies to teach a reading passage—a method deemed most likely to see the effects of the strategies on student reading achievement.

RESULTS AND CONCLUSIONS

The project-wide questionnaire showed that teachers' ratings of ALA overall and of the strategies in general were fairly high. They had lower ratings about the extent to which they thought the strategies would help motivate students to read on their own and the extent to which they believed the strategies were used enough in their classrooms to have a positive effect on student reading achievement. They reported a moderate level of use of the strategies, at best. As in past years, the teachers commented on the questionnaires on issues about the complexity of using the strategies. Differences in the teachers' education levels did not account for differences in their perceptions about the project, and their perceptions of their school principals' advocacy for the project were not correlated with other results. However, the number of years of teaching experience was modestly positively correlated with teachers' use of the arts strategies and their opinions about the strategies. This finding is worthy of the Alliance's attention when it trains teachers in the future.

Some of the case study teachers showed stellar practices and increasing confidence—if not full confidence—in using the strategies, but others showed less confidence. The use of the strategies and the teachers' perceptions of their effectiveness generally mirrored their reported levels of confidence in using the strategies. Despite endeavoring to pick a select group of high-quality teachers for the case study sample, the problems that have arisen among the teachers project-wide over the years were found with some of the case-study teachers. The strategies apparently remain complex for a substantial number of teachers, despite the efforts of the ALA project staff. Furthermore, the reading achievement results for the case study teachers' students were favorable compared to the comparison-group students' results for only two of the seven teachers—not a strong finding in favor of the project.

We continue to believe that ALA has the potential for significant effects on student attitudes and achievement. We suggest that these recommendations for the future be considered:

1. *Focus primarily on vocabulary and perhaps on students' explanations of the characters in reading passages*. The strategies seem best suited as teaching tools to help students learn specific words or how to understand characters but are not likely to affect overall reading comprehension.
2. *Conduct future research studies with teachers who are comfortable with using drama and dance strategies to teach elementary language arts.*
3. *Continue to refine the theory underlying the project and the practices of the trainers and mentors with the guidance of language arts experts.* Local experts available regularly for close consultation can help ensure that the project methods address sound teaching theory and reflect good teaching practices. They can also help develop formal mentor training procedures.
4. *Devote resources to providing long-term assistance to the teachers*. Additional face-to-face mentoring to the teachers, and perhaps online resources, will help teachers become more confident in using the strategies.
5. *In future research studies, measure teachers' overall teaching quality independent of their use of the strategies and include student motivation or attitudes toward schools as an outcome variable.*

EVALUATION OF THE FINAL YEAR (2009–2010) OF THE ARTS AND LITERACY FOR ALL PROJECT

This is the report of the final year of the evaluation of the Arts and Literacy for All (ALA) project. ALA is a project of the Hawai'i Arts Alliance (herein called *the Alliance*) funded by the United States Department of Education's Arts in Education Model Development and Dissemination (AEMDD) grants program (Award No. U351D060016). In the project, ALA staff and arts educators trained and guided teachers at four elementary schools in how to use drama and dance strategies (which we call *arts strategies)* to help teach reading comprehension. The project was conducted during a four-year period (School Year [SY] 2006–2007 through 2009–2010), with faculty and staff of Curriculum Research & Development Group (CRDG) in the College of Education at the University of Hawai'i at Mānoa serving as the evaluators of the project. In this report, we describe the evaluation of the project's final year. We include descriptions of ALA, the evaluation methods, and the evaluation findings; we end with a summary and conclusions. Our approach is to present the report in a manner appropriate for the layperson, with technical material about the methods and some lengthy qualitative-data summaries presented in appendixes.

PROJECT DESCRIPTION

The ALA project was a whole-school approach designed to improve student learning and teaching practice through arts integration.[1] ALA was intended to use the arts strategies to help improve student achievement in basic subjects, with an emphasis on reading comprehension achievement, and to address the deficiencies in elementary school students' exposure to drama and dance. The goals of the project, as given in the project proposal, were to (a) show improvement in student reading achievement through the integration of standards-based drama and dance strategies into academic instruction; (b) effectively engage students in learning and increase positive interest in the arts; (c) improve teaching practices and teachers' attitudes toward teaching with the arts using standards-based arts strategies; and (d) observe and document changes in teaching pedagogy as they affect at-risk students.

ALA served four schools (Helemano Elementary, Pearl City Elementary, Kūhiō Elementary, and Kamiloiki Elementary) during the four years of the project. It was limited to four schools due to project funding limitations, despite the research need to include more schools for statistical reasons. It is served the teachers of all the grades in each school. The focus on the evaluation was on Grades 3–5, in which effects were thought to be more likely than in the earlier

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[1] The Hawaiian word *ala* can be interpreted as "path or road" or "to awaken or renew."

grades, in part because of the nature of the arts strategies and in part because data collection at those grade levels could be more nuanced and feasible than at the earlier grade levels. After a year of project planning and instrument development (Year 1, SY 2006–2007), the Alliance provided project services to two of four volunteer elementary schools on the island of Oʻahu in Year 2 (SY 2007–2008), with the other two schools serving as a control group. The schools were randomly assigned to the groups within two matched pairs. Matching was conducted on school size, socio-economic status (measured by the proportion of students with free/reduced-price lunch status in schools), mean reading achievement (measured by the Hawaiʻi State Assessment), and ethnicity. In Year 3 (SY 2008–2009), the remaining two schools began receiving services, with the teachers in the first two schools continuing to participate in workshops and, upon the teachers' request, to receive mentoring services.[2] In Year 4 (the focus of the present report), the group that was first received services in Year 2 was in a maintenance mode, and the group that first received services in Year 3 received a second year of services.

ALA Arts Strategies

ALA staff taught six primary strategies:

1. With the *Snapshot* strategy, the teacher has students stand in a circle and provides a "prompt" such as a vocabulary word or a description of the author's message in a reading passage. The students show the prompt with body shapes or facial expressions; they observe and describe each other and comment on other ways in which they might manifest the word or message using drama or dance. The teacher provides formative feedback to the students.
2. With the *Tableau* strategy, the Snapshot is enhanced by having students work in groups. The students may act out a scene from a reading and illustrate the relationships among the elements in the scene.
3. With the *Expressive Dance* strategy, the Snapshot is enhanced by adding movement.
4. In *Domino*, the students "pass" a shape, movement, and/or sound, around a circle, one person at a time.
5. In *Echo*, the leader does a shape, movement, and/or sound; the follower(s) repeats the shape, movement, and/or sound.
6. With *Mirroring*, the leader moves and the follower(s) mirrors the movement simultaneously.

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[2]This evaluation design was a quasi-experimental, pre/post matched-group "switching replications" design (Shadish, Cook, & Campbell, 2002). The design addressed one of the major problems in experimental or quasi-experimental designs—the need to deny treatment to some participants through random assignment. It assured that all the teachers would eventually get access to the project training.

ALA Professional Development

Teachers at the four schools attended a four-day summer workshop and participated in two follow-up days of training during the school year in their first year in the project. In addition, artist educators served as mentors for the teachers in the classroom, where they modeled how to conduct the strategies, observed the teachers implementing the strategies, and provided formative feedback to the teachers about how to improve their use of the strategies. Teachers received mentoring services upon request in the second and third years of participation in the project.

Institute and workshops. ALA offered a four-day professional development (PD) institute during the first summer of teacher participation and two all-day workshops in the fall of the same year. The PD was designed to (a) give teachers the opportunity to comprehend some of the elements and principles of the arts; (b) learn, practice, and use strategies in drama and dance to teach core academic subject matter; and (c) allow teachers to develop a collaborative learning community with expert arts educators and among themselves. During the summer institutes, the teachers became familiar with the basic elements of the arts; in the workshops, the elements and the teachers' experiences up to that time were addressed in greater depth. The trainers in both settings described using the strategies to engage students in active learning, and the teachers were given opportunities to build their confidence in using the strategies with fellow teachers. The institute and workshops provided participatory experiences for the teachers and mentors, including warm-up activities; whole- and small-group activities; group discussions and reflections; sharing of the teachers' experiences with implementing the arts strategies and conducting lessons; and collaborative planning time for the teachers and mentors. By the final year of the project, 74 teachers had participated and remained at the schools for the project's duration.

ALA mentoring and teacher observations. In addition to the follow-up workshops, ALA staff provided mentoring to strengthen the teachers' understanding and use of the arts strategies. Expert arts educators served as the ALA mentors, visiting the teachers' classrooms for approximately two hours per visit up to eight times during the school year. They worked closely with the classroom teachers, preparing arts-based instruction as well as discussing how to use the arts strategies to manage the classroom. The mentors modeled the arts strategies in the classroom with the teachers' students, co-taught with the teachers to build teacher confidence, and provided feedback when observing the teachers using the arts strategies on their own.

The observation and feedback component of the mentoring was thought to be essential for determining the extent to which teachers used the arts strategies effectively. Through the observation and feedback processes, ALA developers and mentors examined the implementation of the activities in the classroom and learned how to improve the project.

As the teachers' skills were refined through the mentoring, the ALA project manager and—in most cases—an artist mentor formally observed and rated the teachers on quality criteria. The quality criteria addressed features of strategy use that the ALA project team considered to be central to good arts-based instruction—for example, effectively communicating to the students the connection between the strategy and the lesson objective, prompting the students to explore creatively, and prompting the students to articulate their understanding of the lesson objective. After each observation, the teacher provided his or her interpretation about the use of the strategies and addressed the mentors' questions about (a) the extent to which the teacher felt the lesson was successful in meeting its objectives, (b) the challenges the teacher experienced in using the strategies, and (c) how strategy implementation might have been improved. The mentors provided feedback about the perceived strengths of the lesson and suggested improvements. This provided both the teachers and mentors with formative feedback about the project activities.

THEORY UNDERLYING THE PROJECT

Reading Theory Underlying the Use of the Arts Strategies

Over the course of the project and its preceding grant project (the Arts First Windward Research Project, another AEMDD grant that took place from 2002 through 2006), project personnel and its consultants developed and refined the theory underlying the use of the arts strategies to assist in reading comprehension instruction. The theory drew from Root-Bernstein and Root-Bernstein's (1999) notions of the three "thinking tools"—observing, patterning, and representing. In ALA, students (a) *observed* details closely to gain a deeper understanding of the subject material, (b) identified *patterns* of elements in subject material, and (c) *represented* the details and patterns through drama or dance activities. After identifying the meaningful components of a story and representing them through movement, students reflected with their peers and teachers about the quality of their representations and their overall understanding of the target reading material. It was intended that, through these steps, students would improve their understanding of the fictional or non-fictional characters' traits and ultimately broaden their comprehension of reading passages. Arts strategies have wide applicability; they can be infused into any part of a reading lesson, allowing the teachers great versatility. The theory emphasizes active engagement; doing drama and dance is not sedentary. In large part because of the likelihood of increasing students' engagement in school and learning, it also emphasizes that the strategies might help students who are at risk of failure educationally.

ALA theory about the use of the arts strategies to assist in reading instruction is supported by theories of reading comprehension, active learning, and imagery. Theory and research on reading

comprehension suggest that elaborating on information can greatly enhance memory. Elaboration involves a deeper level of processing information, which has a positive effect on memory (Craik, 2002; Craik & Lockhart, 1972; Craik & Tulving, 1975). Elaboration is enhanced by active learning techniques—that is, instructional activities that involve students in doing things and thinking about what they are doing—that promote reflection on material learned and mental representations that help students increase and retain their level of understanding of the material. Students who reflect and comment on the reading passages for any purpose develop skills to handle the concepts in their subject material. The effects of this engagement can extend beyond the classroom and foster student motivation to learn (Wilhelm, 2008).

Imagery is a form of active learning that has been shown to be effective for teaching reading comprehension (e.g., Pressley, 1976, 1977). The findings of research on imagery and memory (e.g., Anderson, 1990, McMaster, 1998) have suggested that imagery helps students create visual images of what they read, break down stories into meaningful components (propositions), and elaborate on what they read so that the information can be processed more deeply—all components of ALA's arts-based instruction. Imagery can increase the capacity of working memory during reading by assimilating details and propositions (the basic building blocks of sentences) into chunks that are carried along during reading. It builds on students' prior knowledge so they can enhance their ability to retain and recall what they read. It helps children make comparisons and analogies and can function as an organizational tool for coding and storing meaning.

PD Theory

ALA institutes reflect key aspects of the theory and principles of effective PD that have been identified and empirically verified in recent years (e.g., Desimone, 2009). Effective institutes address several core features, including (a) a focus that shows the link between content and student learning, (b) teacher active learning, (c) activities consistent with teachers' knowledge and beliefs, (d) duration that is sufficient to increase the targeted teacher knowledge and skills, and (e) a structure that addresses teachers with common interests (e.g., same school, grade, or department). The ALA institutes, follow-up workshops, and mentoring were intended to demonstrate the link between reading instruction and the arts strategies in various ways and for various stages of teaching. Teachers learned by practicing the strategies and engaging with each other throughout the institutes. The strategies were often new to teachers; the training focused on explaining how the teachers could use the strategies effectively, thereby helping to counter the likelihood of teacher skepticism. Including the mentoring, the training occurred over many months.

Mentoring Theory

Mentoring is a means to facilitate PD and provide emotional support to novices in a discipline (Little, 1990; Wang & Odell, 2002). Through guided instruction and ongoing support, mentors help teachers gain opinions of self-efficacy about using innovative teaching approaches. Novice teachers regard mentors as significant service providers when the mentors (a) are encouraging and positive; (b) provide a consistent source of help and support; (c) are easily accessible, available, and organized; and (d) provide subject matter expertise.

Mentoring with a situated-apprentice perspective emphasizes supporting the development of techniques and skills necessary in a particular context. Theory on situated cognition and cognitive apprenticeship (Brown, Collins, & Duguid, 1989; Collins, Brown, & Newman, 1989) highlights the effects that context and teachers' knowledge base has on acquiring new skill sets. Mentoring can help novices overcome personal challenges and feel comfortable in a new environment. From a constructivist perspective, mentoring transforms teaching by engaging teachers and mentors in collaborative inquiry. By providing ALA teachers with observation and feedback, both the teachers and the mentors learn how to support each other and learn the circumstances under which the strategies are effective.

PROJECT HISTORY

Background

ALA is the successor to an AEMDD-funded project—the *Arts First Windward Research Project* (AFWRP)—that was conducted during SYs 2003–2004 through 2005–2006. It was administered in three schools randomly assigned from six volunteer schools on the windward coast of the island of Oʻahu. The three schools not assigned to the project served as a control group. The project was the Alliance's first endeavor to disseminate the arts strategies and to examine them rigorously and widely in Hawaiʻi public schools. It drew from the strategic plan for incorporating and integrating the arts into public school education that was initiated in 1999 by the Hawaiʻi State Foundation on Culture and the Arts at the behest of the Hawaiʻi State Legislature, Act 180 (Hawaiʻi Alliance for Arts Education, 2007). The centerpiece of the plan was a teacher toolkit, *The ARTS FIRST Essential Arts Toolkit: Hawaiʻi Fine Arts Grade Level Guide for the K-5 Classroom Teacher* (Hawaiʻi Alliance for Arts Education, 2007), that provided a framework for connecting visual arts, music, dance, and drama strategies with the state education standards for core school subjects in the elementary grades.

Evaluation Results to Date

The AFWRP and ALA evaluations' qualitative data results through SY 2008–2009 (from interviews and focus groups, supported by some of the teacher survey questionnaire results)

showed some similarities between the teachers' and students' attitudes toward the use of the strategies. The teachers indicated that they thought the strategies increased their students' vocabulary knowledge, enhanced their writing quality, improved the sense of classroom community, and tended to be effective with students who were at the greatest risk of educational failure. Students' opinions about the strategies were similarly positive about the use of the strategies.

The AFWRP evaluation's quantitative data results (from achievement tests and attitude questionnaires) tentatively showed positive project effects at the end of the three project years (Brandon, Lawton, & Krohn-Ching, 2007). We characterize the results as *tentative* because positive results were not found in all the treatment schools and because other school-wide reading programs might have accounted for project success. The results for the first two of the three years of classroom implementation of the ALA project, however, showed that the project school students' average reading comprehension achievement scores were lower than the control school students' levels. Other data yielded several additional findings:

1. The longer teachers were in the project, the more they used the strategies.
2. The higher they rated the usefulness of the strategies, and the longer they were in the project, the stronger the relationship was between their perception of the usefulness of the strategies and their use of the strategies. Furthermore, the greater the number of days that the teachers attended the PD institutes and PD workshops, the more they perceived the strategies to be useful. These findings suggested that the effects of the PD grew over time.
3. The relationship between mentoring and teachers' use of the strategies showed a somewhat different pattern: A notably positive relationship was found only among teachers who were in their first year of participation. This suggested that mentoring only had effects on teachers during their initial exposure to the strategies, although it also might be due to the lower prescribed use of mentors that occurred in teachers' second year in the project.
4. The longer the teachers were in the project, the higher the quality (as shown in external observations of the teachers) of their use of the strategies. This suggested that practice using the strategies had effects over the entire two-year period that the project had been implemented.

Revision of the Evaluation Plans for the Final Project Year (2009-2010)

The original design of the evaluation, which called for us to collect data on student achievement and attitudes for Years 2–4 of the project, focused on examining the extent to which differences between the students of the ALA teachers were due to the length of teacher participation in the project each year. For year 3, it was hypothesized that the students of the teachers who had been in the project for three years would show greater growth in student achievement and

attitudes from Fall to Spring than the students of the teachers who had been in the project for two years. However, the findings of the evaluations in both the first and second years of implementation of the project in the classroom showed more positive results for the second group of students than for students in the first group. That is, the evaluation found that the length of teachers' participation in the project did not affect their students' achievement growth positively. This suggested that it would not be cost-effective or informative for us to continue to examine student achievement for entire schools: If the achievement improvement of students whose teachers who had participated in the program for only one year was greater than the improvement of students whose teachers had participated for two years, there was no logical reason to continue to compare groups for a third year.

Despite the unencouraging findings about the effects of teachers' project participation on student achievement and attitudes, the results showed an effect of length of participation on the degree of the implementation of the strategies (in terms of both the extensiveness of use and the quality of use) and suggested growing teacher appreciation of the strategies over time. Thus, there was good reason to believe that the PD was having an effect, and there was good reason for the project staff to puzzle over why it had not had effects on students' achievement and attitudes.

At the beginning of the final year of the project, the evaluators considered two sets of general questions about the project to date:

1. Did the lack of relationship between length of project participation and student achievement suggest that the strategies were simply ineffective in changing student achievement, or was the measurement of the strategies too insensitive to the effects? There was no reason to expect that the achievement results on tests given to all students in Grades 3–5 at the end of the year would differ from the results found in previous years, but was there reason to expect that the results on a test given immediately after a reading passage that had been taught with the strategies show positive results?

2. Was the growing and improving use of the strategies dependent upon particular characteristics of the teachers? If the practices of exemplary teachers were identified, might these characteristics be identified?

These questions addressed issues that logically stemmed from the evaluators' interpretation of the results of the previous two years' studies and were likely to answer the questions that were the most pertinent to the project staff. The questions were not answerable with the original evaluation design, however. Therefore, with the agreement of the ALA manager, we revised the evaluation design, proposing two evaluation components: (a) a *total-project component* for which we collected questionnaire data, as we had in previous years, from all teachers about their implementation of, and their opinions about, the project and (b) a mixed-method *case-study*

component for which we examined a sample of teachers who the ALA project manager believed were among the most successful in using the strategies. The purposes of collecting questionnaire data were to learn the extent to which the teachers used the strategies during SY 2009–2010 and to collect data on their opinions about the strategies. The purpose of the case study component was to examine the practices of a sample of teachers that the ALA manager believed had shown the most exemplary practice and implementation of ALA. Not all high-performing teachers could be examined, of course, and the practices, backgrounds, and contexts of high-performing teachers who were not included in the case study sample might vary from the seven that were. Nevertheless, it was our hope that a close look at the seven sampled teachers would help provide insights about exemplary practice that would assist the ALA manager and others who implement and teach the strategies in the future.

BRIEF DESCRIPTION OF THE METHODS OF THE EVALUATION

The evaluation's two components addressed (a) all teachers who had been served in the project and (b) a sample of teachers for the case study. We describe the methods of the two evaluation components briefly here for the project staff and other lay people and provide details for the technical reader in Appendix A.

The Total-Project Component

To collect data on teachers' use of and opinions about the arts strategies, we distributed an online questionnaire to all participating teachers in the four schools (total $N = 74$) in May 2010, with follow-up email reminders sent in August 2010 to the teachers who failed to respond in the spring. By August of 2010, 70 teachers had completed the questionnaires (95% of the full group of 74 teachers who participated in the project and remained at the schools for the project's duration). A copy of the questionnaire is shown in Appendix B. The results of the analyses are presented in the next section.

Case Study Component

The case study component adopted the *illustrative case study model* described by the U. S. General Accounting Office (GAO) (1990). In an illustrative case study, detailed description of a case or cases is provided to help an audience learn more about an entity such as an educational or social program. Some of its functions are to "make the unfamiliar familiar" and to "provide surrogate experience" (GAO, p. 38). As described by the GAO, illustrative case study design features include (a) the selection of a small number of typical cases or those representative of important variations, (b) analyses "concerned with data quality and meaning," and (c) reporting that includes "self-contained, separate narratives or descriptions" (p. 38). We endeavored to follow these design features in the case study component of the 2009–2010 ALA evaluation.

Table 1. *Comparison of Case Study and Non-Case Study Teachers on Three Variables*

Variable measured in the evaluation questionnaire	*N*	Mean	*STD*	*SEM*
Case study teachers (57% with Master's degrees)				
Total score on items about the teacher's opinions of the effectiveness of the ALA strategies (maximum possible = 55)	7	44.7	6.34	2.40
Total score on items about how often the six ALA strategies were used (maximum possible = 30)	7	21*	3.11	1.17
Non-case study teachers (24% with Master's degrees)				
Total score on items about the teacher's opinions of the effectiveness of the ALA strategies (maximum possible = 55)	59	39.3	9.45	1.23
Total score on items about how often the six ALA strategies were used (maximum possible = 30)	63	16.52*	4.71	.59

*Statistically different means between groups ($F = 5.97$. $df = 1$, $p = .02$)

Sample. The ALA project director identified eight teachers whom she believed were representative of good teaching practices and the best users of the ALA classroom instruction strategies. Her selection was based on her extensive involvement with the teachers during the PD institutes and follow-up workshops and on the observations she had done in the participating teachers' classrooms over the course of the project. Of the eight teachers, seven agreed to participate. They were from three of the four project schools (two each from two of the schools and three from a third school); two taught Grade 3 (called here Teachers B and E), one taught Grade 4 (Teacher A), and four taught Grade 5 (Teachers C, D, F, and G). As seen in Table 1, in which we show some of the data collected on the evaluation teacher questionnaire, the seven teachers had more education compared with the non-case study teachers, had a more positive opinions about the effectiveness of the strategies, and, in a statistically significant comparison, used the ALA strategies more. These results help confirm that the project manager addressed the involvement-and-expertise criterion for case study teacher selection.

Instruments. The case studies used a mixed-method design that included (a) classroom observations while the teachers were using the strategies, (b) the teachers' responses to Part C of

the teacher questionnaire, (c) teacher logs, (d) teacher interviews, and (e) posttesting with strategy use as the "treatment" and a non-treatment comparison class for each case study teacher. (We describe the methods for collecting data with these instruments in detail in Appendix A and copies of all the instruments except the tests in Appendix B.)

The purpose of the observations was to examine the quality of the use of the ALA strategies in teaching reading comprehension. They were conducted an average of 2.14 times per teacher by a team of trained raters. The raters judged the teachers on six quality criteria (with ratings on a nine-point scale) that were developed over several years of ALA and the previous grant project (Brandon, et al., 2007). The psychometric quality of the observations (including interrater agreement) was high.

The purpose of Part C of the questionnaire was to collect data in 11 rating-scale items that addressed teachers' perceptions of the effectiveness of the ALA strategies. We call the items the *Effectiveness Scale.*

The purpose of the logs was to gather information about the frequency of the use of the six primary ALA strategies each week. The teachers recorded logs for the 19 weeks of the second semester of SY 2009–2010.

The purpose of the interviews was to gather detailed information about the teachers' comfort in using the ALA strategies and how they used the strategies when planning, teaching, and assessing student understanding, as well as information in response to general questions about the teachers' use of the strategies. Full summaries of the interviews are presented in Appendix C.

The purpose of the posttest was to compare the reading achievement of ALA students with the achievement of comparison groups of other students after the seven case study teachers had taught reading passages that had been selected by the ALA project manager.

In Appendix A, we describe in detail how we analyzed the data for each of the instruments separately. We also describe how we combined the observation, Effectiveness Scale, log, and interview results into case-study analyses.

EVALUATION RESULTS FOR THE TOTAL-PROJECT COMPONENT

The findings of the total-project component of the evaluation are based on the questionnaire responses of the teachers at all four schools. The results of the teachers' ratings of ALA are shown in Tables 2–4. In Table 2, we show the teachers' overall opinions of the ALA strategies on a 1–6 scale, where *1* = strongly disagree and *6* = strongly agree. As has been the case in previous years' evaluations, the average (mean) teacher ratings of ALA were fairly high, ranging from 4.1 to 5.0. The lowest-rated item had to do with having enough space to do ALA strategies in the classroom—an issue that has been raised in previous years. Of some concern is the mean

Table 2. *ALA Teachers' Responses to Questionnaire Part A, "Teachers Views About the ALA Arts Strategies"*

Item	N	M	SD	SEM
1. I think using the ALA art strategies when teaching helps children learn reading.	70	5.0	0.8	0.1
2. I am concerned that ALA strategy activities are *too noisy or disruptive* for the classroom.	70	4.7	1.2	0.1
3. I have enough space to use ALA strategies effectively in the classroom.	70	4.1	1.4	0.2
4. My students have trouble concentrating on other work after I use the ALA strategies to teach.	70	4.7	1.2	0.1
5. I am confident in my ability to facilitate ALA activities.	70	4.2	1.1	0.1
6. I think there are many students in my class who benefit from the ALA activities.	70	5.0	1.1	0.1
Total scale score (maximum possible = 36)	70	27.7	4.5	0.5

Note. Responses were on a 6-point, strongly agree-strongly disagree scale (6 high). Items 2 and 4 were reverse scored.

rating of 4.2 about the confidence to conduct ALA strategies; although this result is higher than the mid-point of the scale, it nevertheless shows some tenuousness in the teachers' self-efficacy about conducting the activities.

In Table 3, we show the mean ratings on a 1–5 scale of the teachers' opinions about the effectiveness of the strategies, where *1* = not at all, *2* = very little, *3* = somewhat, *4* = quite a bit, and *5* = very much. Like the averages shown in Table 2, the averages in Table 3 were also all above the mid-point of the scale. The rating averages were highest for items about the teachers' perceptions of the degree to which the strategies were helpful as learning and teaching tools and the degree to which they helped students understand difficult concepts in reading comprehension. The lowest averages were on items about the teachers' perceptions of the extent to which the strategies help improve students' motivation to read on their own and the extent to which the strategies were used enough to have a positive effect on student reading achievement.

In Table 4, we show the teachers' reports of how often they used the strategies. The teachers responded on a scale of 1–5, where *1* = none of the time, *2* = not very often, *3* = sometimes, *4* = often, and *5* = very frequently. The highest ratings were for Echo and Snapshot strategies (about

Table 3. *ALA Teachers' Responses to Questionnaire Part C, "Effectiveness of the ALA Strategies"*

Item	N	M	SD	SEM
To what extent. . .				
1. . . .were the strategies useful in helping students understand difficult concepts in reading comprehension?	64	3.8	1.0	0.1
2. . . .were the strategies valuable to you as a teaching tool?	66	3.9	0.8	0.1
3. . . .were the strategies helpful to your students as a learning tool?	65	3.9	0.7	0.1
4. . . .was the use of the strategies an efficient use of your pedagogical time?	66	3.6	0.8	0.1
5. . . .will you continue to use the strategies once the project is complete?	66	3.9	0.9	0.1
6. . . .do you believe that the strategies were effective enough to improve students reading achievement?	66	3.5	0.9	0.1
7. . . .do you believe that the strategies increased students' confidence in reading?	66	3.5	1.1	0.1
8. . . .do you believe the strategies increased students' value of reading?	66	3.6	1.1	0.1
9. . . .do you believe the strategies were used enough to have a positive effect on student reading achievement?	64	3.4	1.0	0.1
10. . . .do you believe that strategies increased students' motivation to read on their own?	66	3.2	1.1	0.1
11. . . .did the strategies help you teach students better?	65	3.8	0.9	0.1
Total scale score (maximum possible = 55)	66	39.9	9.3	1.1

Note. Answered on a 1–5 scale, where *1* = not at all, *2* = very little, *3* = somewhat, *4* = quite a bit, and *5* = very much.

halfway between "sometimes" and "often" on the scale), and the lowest was for Expressive Dance. These results show a moderate level of use, at best, as we have reported in previous studies; they also show that two of the three most complex strategies (Tableau and Dance, with

Table 4. *ALA Teachers Responses to Questionnaire Part B, "Teachers Use of the Arts Strategies"*

Item	N	M	SD	SEM
In general, *how often* did you use each of these strategies this school year?				
1. Domino	70	2.6	1.0	0.1
2. Echo	70	3.6	1.3	0.2
3. Mirror	70	2.9	1.2	0.1
4. Snapshot	70	3.4	1.2	0.1
5. Tableau	70	2.4	1.1	0.1
6. Expressive Dance	70	2.0	1.2	0.1
Total scale score (maximum possible = 36)	70	17	4.8	0.6

Note. Responses were on a 1–5 scale where *1* = none of the time, *2* = not very often, *3* = sometimes, *4* = often, and *5* = very frequently.

Snapshot being the third), which can be expected to have the greatest effect on reading achievement, are used the least.

We took a deeper look at the questionnaire results to identify differences, if any, between teachers. First, we compared the average Effectiveness Scale total scores between the 25 teachers who reported having Master's degrees and the 40 teachers with less education. (Of the teachers, five did not report their education level.) For teachers with Master's degrees, the average total score was 40.32, and for teachers without Master's degrees, the average was 39.65—a trivial, statistically nonsignificant difference. Second, we examined the teachers' perceptions of their principals' advocacy for using ALA. The average rating of advocacy was 3.8—slightly below "quite a bit" on the 1–5 scale, indicating a fairly high level of support. To examine principal advocacy further, we calculated the correlation between teachers' reports of how much their principals advocated the use of ALA strategies and (a) the total score on six items about the teachers' overall views about ALA (Part A of the questionnaire), (b) the total score on the 11 items about the teachers' perceptions of the effectiveness of the strategies (Part C of the questionnaire), and (c) the teachers' reports of the use of the strategies (Part B of the questionnaire). The correlations were not statistically significant; indeed, the first two correlations were virtually zero. This shows advocacy did not affect teachers' opinions about the

strategies or their use of the strategies. Third, we examined the relationship between the number of years that teachers taught and their opinions and use of ALA. These correlations were all modest but statistically significant at the .05 level (the correlations of number of years teaching with overall views about ALA and with effectiveness of the strategies were both .38; with frequency of use, the correlation was .36). Thus, the longer that teachers have taught, the more positive their opinion of ALA and the more they used the strategies.

In the final quantitative analysis of the questionnaire data, we examined the extent to which the teachers reported that they found discussions about the strategies with other teachers to be helpful and the extent to which they learned about the strategies from other teachers. Of the 70 respondents, 54 (77%) stated that they had learned from others; their average ratings of the helpfulness of the discussions with the teachers and the extent they learned from the teachers were both 3.9—very close to *4*, which is labeled "quite a bit" on the 5-point scale. This indicates that the project's emphasis on teacher collaboration was successful.

In addition to providing quantitative results, some teachers also provided written comments about the project on the questionnaire. We list those verbatim in Table C-1 in Appendix C. As seen in the table, most of the comments were positive, with accolades for the project.

In summary, the results on the teacher questionnaire show fairly high ratings of the project, sufficient advocacy for the project by school administrators, and discussions about the strategies among the teachers. We interpret these findings to show that the project was well-received by the teachers and principals. The most experienced teachers in particular had favorable opinions about the project. The teachers' written comments were strongly positive about the project and its effects on their teaching. The results also show, however, that the teachers rated the effects of ALA strategies on student motivation and reading achievement lower than they rated other aspects—a finding that mirrors the results of little effect on achievement in previous years.

EVALUATION RESULTS FOR THE CASE STUDY COMPONENT

Mixed-method studies by definition include results from qualitative and quantitative data collection instruments. To examine implementation in this mixed-method study, we collected data in teacher observations, teacher logs, and from the teachers' responses to interviews and the questionnaire. It is not unusual for the findings of different methods to lack congruence. In this section, we attempt to make sense of the findings of the mix of methods, first with a summary of the implementation of the project and then with a summary of the outcomes testing.

Project Implementation

We have attempted to find commonalities among the seven teachers and to describe them in a manner helpful for further project implementation. We do this in three ways. First, we present

Table 5. *Themes Addressed in the Summaries of the Interviews of the Seven Case Study Teachers*

Interview theme	Case study teacher						
	A	B	C	D	E	F	G
The teachers' perceptions about the effects of ALA as a teaching and learning tool							
Increased student reading comprehension	✔	✔	✔	✔	✔	✔	✔
Increased student engagement	✔	✔	✔	✔	✔		✔
Increased student collaboration			✔	✔		✔	✔
Increased teacher competence	✔			✔			
Increased student motivation		✔	✔		✔	✔	✔
Increased student involvement	✔			✔		✔	✔
Strategies increased test scores				✔			
Teachers' intent to use the strategies in the future	✔	✔	✔	✔	✔		
Unlikely that the strategies affected test scores	✔	✔					
Contextual issues affecting the implementation of the ALA strategies							
School or classroom contextual issues			✔			✔	✔
Tailoring ALA to the teachers' needs	✔		✔	✔	✔		
Teacher level of comfort with the strategies	✔		✔	✔	✔	✔	✔
ALA as complex and time consuming		✔		✔	✔		

an overview of the teachers' comments in the interviews. Second, for each teacher, we summarize the findings across the three quantitative methods and add reflections from the interviews. Third, we divide the teachers into three clusters and discuss patterns across teachers within each of the three clusters.

Overview of the categories of teachers' interview comments. To begin, we examine the results of teacher interviews, our in-depth qualitative data. The interview summaries that we present in a journalistic-like format in Appendix C include a wealth of information about the

Table 6. *Summary of the Results of the Case Studies for Three Quantitative Instruments*

Teacher	Observations		Log		Effectiveness Scale	
	Standardized score	Ranking symbol	Standardized score	Ranking symbol	Standardized score	Ranking symbol
A	1.0	+	-0.71	–	0.52	+
B	0.63	+	-0.52	–	-1.53	– –
C	-0.45	–	0.13	●	0.36	+
D	-0.39	–	2.18	+ + +	1.62	+ +
E	1.19	+ +	-0.14	●	0.04	●
F	-1.64	– –	-0.52	–	-0.27	–
G	-0.33	–	-0.41	–	-0.74	–

Note. The observations measured the quality of the teachers' implementation of the strategies, the logs measured the extent to which the teachers used the strategies, and the questionnaire measured the teachers' perceptions of the effectiveness of ALA. Symbols for interpreting the standardized scores ($M = 0$, $STD = 1$): "●" = from -.25 through +.25 (essentially at the average of the scores); "+" = .26 through 1.0; " + +" = 1.0l through 1.75; "+++" = greater than 1.75; "–" = -1.00 through -.26; and "– –" = less than -1.01.

case study teachers' practices and use of the ALA strategies. We encourage the reader to examine them closely.

In the interest of providing an overview of the teachers' interview comments, we present Table 5, which shows the major themes that we identified in our review of the comments. As seen in the table, the comments are divided into a section for categories of comments about the strategies as *teaching or learning tools* and a section for categories of comments about *contextual issues* affecting the use of the strategies. All the teachers commented on their perceptions of how the use of the strategies increased student reading comprehension, and six commented on how the project increased student engagement in reading. Five of the teachers commented on how the project resulted in increases in student motivation, and four commented on how the project increased student collaboration and student involvement in classes. Five of the seven teachers indicated that they intend to use the strategies in the future, but only two commented that their competence in using the strategies had increased. Only one teacher said that she believed the strategies helped improve test scores; two indicated that they did not think that the strategies helped improve test scores. The issue of the level of comfort or discomfort with the strategies came up with several teachers; three of the teachers mentioned classroom or school

issues that affected implementation, and three mentioned that the strategies were complex and time consuming. The teachers' comments fell into a few other categories as well.

The quantitative results for each teacher, as informed by the interview results. In Table 6, we summarize the three sets of quantitative results (for the observations, the Effectiveness Scale, and the log) in the manner described in Appendix A, with symbols indicating rankings of the teachers. The reader should refer to this table when reviewing the results for each teacher in this section.

Although her observation results were slightly below average, **Teacher D**'s log results showed by far the most use of the ALA strategies, and she rated the effectiveness of the strategies the highest of all seven teachers. In a phrase, Teacher D was completely sold on the ALA project. She stated that she believed that ALA can be used as a way to prepare the students for improving their test scores while simultaneously teaching the whole child. Despite having no training in drama or dance before the project, and despite having reporting moderate levels of support for ALA at her school, she believed ALA was a successful model in building student self-efficacy, increasing test scores, and enhancing collaboration among students. She reported tailoring ALA to maximize the learning possibilities; for example, she interspersed ALA strategies with student writing exercises, describing it as the "back and forth from the drama to the writing." She credited the project for having made her a more competent teacher. She said, "I just want to thank everybody. It definitely has increased my level as a teacher, my skills."

In her written debriefing about the teachers, the interviewer wrote that Teacher D "is an extraordinarily articulate teacher who seems to have a rich understanding of content and pedagogy. . . . She stood out for the high expectations she holds for her students and her implementation of both drama and dance strategies. . . . [Teacher D] used the strategies as both a method to advance student understanding of the concepts being taught and as an aspect of formative assessment."

Teacher E's observation results show the greatest quality of implementation of the strategies. (See Table 6.) Her ratings of the effectiveness of the strategies and her average weekly use of the strategies were at the average level for the seven teachers. For Teacher E, the project was about making it "her own" while balancing the model with other approaches—for example, by integrating it into her understanding-by-design approach to lesson planning. In her debriefing comments, the interviewer wrote, Teacher E "is an unusually adaptive teacher who seems to see value in integrating the strategies as evidenced by the amount of time she is willing to spend in rewriting and reflecting on the effective integration of the curriculum into the content and her pedagogical understanding." Teacher E used the students' experiences in the arts to help them connect with characters in reading passages and to find evidence supporting interpretations and

predictions. She said that the students "learn to observe, you know, very carefully. They learn to describe, they learn to predict, they learn to interpret what the characters are doing or what the situation is all about just by looking." Teacher E stated that she saw ALA as a useful teaching tool to deepen the students' overall engagement and comprehension while increasing motivation. Nevertheless, she understood why some other teachers were skeptical about the model, as it is complex and time consuming.

Teacher A showed the next highest level on the quantitative results shown in Table 6. She was a standard deviation above the average on the observation results and about half a standard deviation above the average on the effectiveness ratings. She described herself as an organized teacher who structured her classroom so that her students always know what to expect. Due to her value of structure and organization, she was a bit reluctant to implement ALA into her classroom. She said she was a bit shy and that she initially questioned the use of ALA and drama. However, she was positive about the project, because she believed that engaging students in reading for a longer period of time enhances overall comprehension. When asked if using Snapshot helped their writing, Teacher A replied,

> I asked the children, and they said yes, it makes a difference—It makes it easier for them to *do* the traditional homework, write the definition, use it in a sentence [and] underline the word, so even while I'm doing the Snapshot, I'm kind of prompting them "Okay, now think about your sentence tonight"—you know, "What can your sentence be," you know, while they're holding their snapshot.

Despite her belief in ALA as a useful teaching tool and her intent to continue to use the strategies, however, she was skeptical that these strategies will benefit students on achievement tests or that they will encourage students to read more on their own. Furthermore, the interviewer noted,

> What is curious to me is that although students seem to enjoy participation in the strategies (to the extent that they remind the teacher if she forgets to make time for the strategies), the teacher doesn't seem to value them sufficiently to make time to integrate them more deeply into her practice.

Teacher C's observation results, as shown in Table 6, were about half a standard deviation below the average; the log results were at about the average for the case study teachers, and the effectiveness ratings were about a third of a standard deviation above average. Teacher C described ALA as a great tool for increasing student engagement and collaboration in reading, saying, "The kids really need a variety, you know, through the different senses, you know. I think they learn by doing, by seeing." However, she pointed out that ALA is a complex model. She stated that it was time consuming and that the success of implementation depended on the teachers' comfort in using drama and on the maturity of her students. The interviewer com-mented,

Although [Teacher C] enjoys other artistic endeavors, including participating in hula, she is very uncomfortable with implementing movement strategies in her classroom. She wonders aloud if this has something to do with her need to "control" and concern with classroom management.

Teacher B 's observation results were in the middle of the group of teachers, and her log and effectiveness results showed that she used the strategies and believed in them less than other teachers. She stated in the interview that she believed that ALA activities served as great teaching strategies, and she stated that ALA may be a useful tool to enhance a deeper engagement in reading and overall reading comprehension. However, she was skeptical about the extent to which the teaching methods can translate into learning strategies that students will use on their own or help them when taking tests. She also stated that she was reluctant to use of ALA, because she experienced the strategies as complex and time consuming. Nevertheless, she said, "I definitely plan to continue using [the strategies]—at least what I've been using so far. I'm hoping to try and expand and use more dance and movement next year, but I definitely see benefit to using at least the Snapshots and Tableaux."

Teacher G was somewhat below average on each of the three quantitative case study methods, as seen in Table 6. She stated that she valued ALA because it encourages every student to participate, which can increase motivation as well as students' engagement and collaboration with each other. She believed that the success of implementation depended in part on how much the students were "good thinkers." She also discussed her reluctance to use ALA due to her discomfort with performing drama and dance. When asked if her discomfort was due to having to perform in front of peers, Teacher G explained, "I don't want to look silly. I find that I have an easier time actually when I'm trying to get my kids to do it. I guess because I have to model it, I just do it. But, with the peers, I was a little bit uncomfortable with it."

Teacher F's observation ratings were the lowest of the seven teachers' results, and her level of use of the strategies and ratings of effectiveness were somewhat lower that the other teachers'. Nevertheless, she stated that she saw the value in using ALA:

The kids really respond to it; they really like [it]. Even the more reluctant ones—they look forward to it, they never groan, "Oh, my gosh, we have to do a Tableau today"—they never do that; it's something they look forward to. And when we haven't done it maybe for a while, they'll ask, "Oh, are we going to do Snapshots today? Are we going to do Tableau today?"

She stated that she believed that the strategies increase student collaboration and engagement as well as enhance overall reading comprehension. However, she talked a lot in the interview about her discomfort in using the strategies and how she believed that drama is not in her nature. The interviewer wrote,

When talking about student participation and use of the strategies, [Teacher F] noted her continued struggle with how best to implement the strategies in a way that encourages and

supports student participation and learning. I wondered about her assessment of student capacity. Although she pressed students to demonstrate mastery of lower level skills (basic comprehension), she seemed more passive in her effort to press the level of cognitive demand around more abstract ideas (author's message).

Clustering the teachers into groups. The quantitative results shown in Table 6 and the interview findings suggest three "clusters" of teachers: Teachers D and E in Cluster I; Teachers A, C, and B in Cluster II; and Teachers F and G in Cluster III. We have presented our summaries of the findings for the teachers above in this order. The dividing line between the first two clusters is not sharp, for it can be argued that Teacher A should be included in the first cluster, but after considerable discussion among the members of the evaluation team, we have clustered the teachers in this manner.

The first cluster consists of teachers who showed the highest scores on one or more of the quantitative instruments and were noted by the interviewer and observers for their teaching acumen. Neither of these teachers had little negative to say about the project; Teacher E noted that she understood why some teachers found the strategies difficult to implement because of their complexity and the classroom time that they demand, but these comments were not reflective of her own opinion about implementing the strategies. As the interviewer noted in her debriefing comments,

> The participants' use of multiple ALA strategies seemed to correlate with teachers' professional knowledge, including the depth of their content knowledge of reading/literature and understanding of what are generally thought to be pedagogical best practices. There was a range of professional skill levels represented among the teachers. Teachers' professional knowledge influenced their ability to make connections between grade-level objectives, the curriculum, and use of the strategies. Similarly, teachers' interest and ability to make explicit students' understanding of process and the rationale behind use of the strategies appeared to be moderated by the depth of their content and pedagogical knowledge.

These comments clearly reflect Teachers D and E.

The other two clusters show decreasing use of and confidence in the strategies. Examining the quantitative results in the order we have presented the teachers shows scores increasingly below the average of the group, and reviewing the interview results shows decreasing confidence in teachers' use of the strategies or in their comfort in using the strategies. The interviewer noted that

> implementing the strategies posed a significant challenge for teachers with limited experience in the arts. This was particularly true in the area of dance and movement. Several teachers reported little experience with movement and a general discomfort with dance. Many of the teachers reported being most nervous when learning the strategies in sessions with their peers. They spoke of being fearful that they might look silly in front of adults. (This fear seemed to be less of a concern for teachers when they spoke of demonstrating the strategies for their students.) I was surprised when several individuals mentioned their

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discomfort and then later talked about being members of a hula group! Although these teachers seemed to genuinely enjoy and value their participation in the hālau, including learning the dances and making the instruments and lei, they were still uncomfortable in a professional setting. In each case, teachers' comfort with hula and dancing in the hālau did not seem to translate readily to the ALA project. I am curious why this is so. Most teachers did report feeling more comfortable over time, however, few used the dance strategies on a regular basis.

Furthermore, the interviewer noted that the teachers in the second and third clusters tended to have less effective teaching capabilities:

Several of the teachers' use of the strategies seemed to parallel a general lack of cognitive press in their approach to the curriculum, and in some cases, a devaluing of students' ability to make sense of the curriculum. Few of the teachers seemed to deconstruct current and potential use of the strategies with their students, which one might assume will affect students' ability to transfer knowledge of the strategies to other contexts.

Project Outcomes (Student Reading Comprehension Achievement)

The achievement test study included two analyses, one of primary interest, which we call *Analysis 1*, and one, which we call *Analysis 2*, to help us confirm that the first analysis was appropriately designed. In Analysis 1, we compared the achievement test results of the case study students, who were taught the target reading passages with the ALA strategies, with the achievement test results of the comparison group students, who were taught the passages without using the ALA strategies. In Analysis 2, we compared the two groups of students' achievement test results on reading passages that were not taught by the teachers in either group. The purpose of Analysis 2 was to examine whether there were overall differences in the general achievement of the two groups of students or in the teaching ability of their teachers. The results of this analysis showed no significant differences between the average (mean) scores of the two groups of students, thereby helping to confirm that the comparison group probably was appropriate for conducting Analysis 1.

The results of the Analysis 1, including means, standard deviations, effect sizes, and significance-test results, are shown in Table 7. Using a liberal significance criterion of .10, the results show that Teachers C and F, who were both fifth-grade teachers, outperformed their comparison group classes at statistically significant levels. In one sense, these results are promising, because they replicate the differences that we found for in the AFWRP study and suggest that perhaps ALA is most effective in the higher elementary grades. In another sense, the results are not promising, because they show positive results for only 2/7 of the teachers. The results for all the other teachers show minimal or no differences between case-study teachers' students and comparison-group teachers' students; indeed, one case-study teacher's students' results are slightly lower than the comparison group students' results. Furthermore, as we have

Table 7. *Achievement Test Results*

Teacher	Grade	Case study students		Comparison group students		Effect size	t	p
		Mean	*STD*	Mean	*STD*			
A	4	5.33	0.73	5.55	0.74	-.19	-0.95	0.33
B	3	4.55	1.19	4.21	1.27	.19	0.86	0.40
C	5	5.26	1.05	4.58	1.06	.43	2.20	0.03
D	5	5.52	0.98	5.39	0.72	.10	0.51	0.61
E	3	3.75	1.34	3.93	1.22	-.09	-0.40	0.69
F	5	5.39	0.70	4.89	1.05	.40	1.68	0.10
G	5	4.95	1.31	4.89	1.05	.03	0.14	0.89

shown above in our discussion of the findings about ALA implementation, one of the two fifth-grade teachers showing positive results (Teacher C) is in the middle cluster of teachers and the other (Teacher F) is in the bottom cluster, while the teachers in the top cluster show no differences in one case and negative results in two other cases. This pattern suggests no effects of the project on the achievement of the case study students.

SUMMARY AND CONCLUSIONS

The evaluation reported here was the final portion of a four-year research study of the ALA project for the Hawai'i Arts Alliance. This report is the third that we have prepared for ALA and follows three reports that we prepared for the ARTS FIRST Windward Research Project (AFWRP), the Alliance's first AEMDD grant project. Over the course of a little more than seven years, the Alliance staff has grown more sophisticated and nuanced about the arts strategies and in training teachers how to use and incorporate the strategies in their teaching. We believe the evaluation team's understanding has grown correspondingly and that our insights about the project have built over the years into a cohesive set of conclusions and ensuing recommendations. In this section, we endeavor to summarize our conclusions and recommendations for any future implementations of the project.

The ALA project built on the experiences of AFWRP and on the AFWRP evaluation conclusions in several ways. As we recommended in the final AFWRP report, ALA personnel continued to refine their program model. They narrowed the focus to reading comprehension and

vocabulary (by and large eliminating the mathematics focus) and limited the strategies that they taught the teachers to those that had been deemed most likely to have their desired effects. We worked with the project staff to refine project theory and explicated this theory in our ALA reports and in an AEMDD grant proposal that we helped the Alliance prepare. Although this year we did not explicitly ask teachers about the manner in which they were taught during ALA, we believe that the project staff emphasized more than they did in AFWRP that the strategies must be used frequently if they are to have their intended effects. We developed and refined an observation method that not only provided summative project evaluation results for the evaluation team but also provided formative project evaluation results to the ALA project staff and formative teacher assessment feedback to the participating teachers. All these modifications to the project were intended to help improve the level and quality of project implementation and, ultimately, the effects on student achievement.

The AFWRP evaluation findings showed positive perceptions of the project by both teachers and students. These perceptions continued throughout the ALA project. The second ALA report (prepared in Year 3 of the project) showed several positive findings:
1. The longer the teachers were in the program, the more they used the strategies.
2. The teachers' quality of implementation of the strategies by and large was at or slightly above the midpoint on the observation rating scale, which we believe was reasonable given that teachers were new to using the ALA strategies
3. The more PD days that teachers had, the more they found the strategies useful in their teaching.

However, despite tentative findings that AFWRP had positively affected student achievement, these outcome results did not continue into the ALA project. Despite the improvements that the project staff made in understanding the theory of using the arts to teach reading, and despite the refinements made in training the teachers in how to use the arts in their instruction, the project was not showing its intended effects.

Because of the lack of effects, we suggested modifying the evaluation methods for the final year. Instead of continuing to collect data on all instruments from all the project participants, which our experience told us would not yield findings showing positive effects, we proposed to limit our project-wide data collection to a questionnaire distributed to all the participating teachers at the end of the year and to expend our remaining resources on case studies of a sample of teachers who the ALA staff perceived to be most effective in using the strategies in their teaching. Toward that end, we collected log data, interview data, observation data, and student achievement data from seven case study teachers in the manner that we have described in this report. The interviews were the first individual teacher interviews that we have conducted over

the seven years of our involvement with the Alliance and have, we believe, yielded important insights about the teachers' practices and contexts in using the arts to teach reading. The observations were conducted of each teacher more frequently than in past years, and our analyses of their psychometric quality—greatly expanded over the analyses in previous years—shows that the data were reliable. The logs have provided an intensive look at how often the strategies were used. The case study teachers completed the logs more faithfully than the full group of teachers did in the past, thereby giving us increased confidence in the log results. The student achievement data collection was designed to focus on the short-term effects of teaching specific reading comprehension passages, with comparison groups. Together, the findings from these instruments were intended to give better insights into the practices of the best ALA teachers and to increase the likelihood of finding effects on student achievement.

The project-wide questionnaire provided positive findings about the project, consistent with the findings of questionnaires and focus groups that we have reported in previous years. The teachers' ratings of ALA overall were fairly high, as were their ratings of the effectiveness of the strategies. In their ratings, the teachers continued to highlight issues about the complexity of using the strategies, such as having insufficient space to do ALA strategies in the classroom. They gave high ratings for the value of ALA strategies as pedagogical tools, such as when helping students understand difficult concepts, but their lowest ratings were about the extent to which they thought the strategies would help motivate students to read on their own and the extent to which they believed the strategies were used enough to have a positive effect on student reading achievement. Furthermore, they reported a moderate level of use of the strategies, at best, and indicated that, of all the strategies, their lowest level of use was of the strategies that can be expected to have the greatest effects on student motivation and learning.

The project-wide questionnaire results shed some light on how little the differences among the ALA teachers' backgrounds and teaching contexts affected their perceptions about the project. The number of years of teaching experience was modestly positively correlated with teachers' use of the arts strategies and their opinions about the strategies. This finding is worthy of the Alliance's attention when it selects teachers in the future. However, differences in the teachers' education level did not account for differences in teachers' perceptions about the project. Also, the teachers' perceptions about degree of the ALA school principals' advocacy were not correlated with other variables.

The case study results show patterns consistent with the results for the project overall that we have found over the years. Strikingly, despite endeavoring to pick a select group of high-quality teachers for the case study sample, the problems that have arisen among the teachers overall have tended to be found with some of the case-study teachers. Some of the teachers showed

stellar practices and increasing confidence—if not full confidence—in using the strategies, but others showed less confidence. The use of the strategies and the teachers' perceptions of their effectiveness generally mirrored the reported levels of confidence in using the strategies. The strategies apparently remained complex for a substantial number of teachers, despite the efforts of the ALA project staff.

The revisions in the reading achievement testing, which were intended as a valid assessment of short-term effects, showed that two of the four fifth-grade teachers had positive effects. These findings can be interpreted as positive for the project if it is believed that the strategies are most effective in the higher grades—a premise that should be examined further but for which we have little prior evidence. We are not confident that this is the correct interpretation of the results, because the two fifth-grade teachers whose students outperformed the comparison group were not among the best users of the strategies.

After attempting multiple approaches to using achievement tests to measure project outcomes over the years of the Alliance's two AEMDD projects (examining statewide achievement test scores as a posttest during the years of AFWRP, using the Stanford Achievement Test as a pretest and posttest for all students during two years of ALA, and conducting the case-study achievement testing this year), we have come to believe that it is likely that the effects of the strategies are more nuanced than can be found in the items from a standardized reading comprehension achievement test. If the focus of the test had been on vocabulary or on students' understanding of a reading-passage character, it is conceivable that an effect would be found, but the strategies are not powerful enough to make a difference when comparing the effects of ALA with teaching that does not use the strategies.

Our recommendations for future iterations of ALA are:

1. *Focus primarily on vocabulary and perhaps on students' explanations of the characters in reading passages*. We believe that evidence that the arts strategies can improve overall reading achievement scores or generalize to student practices outside of the classroom is lacking. The strategies seem best suited as teaching tools to help students learn specific words and to help pinpoint specific aspects of fictional characters and the subtleties of word meaning. We believe that the evaluation should take advantage of these foci of the use of the strategies. In future studies, vocabulary learning can be precisely measured in multiple-choice tests that evaluators can select or develop with sufficient validity. Students' understanding of characters would need to be examined in think-aloud protocols that plumb student explanations deeply. Fortunately, a dissertation adopting this approach will be conducted locally in the spring of 2011. The findings of the study will help inform ALA

personnel about the prospects for achieving measurable student outcomes by refocusing the study.

2. *Conduct future research studies with teachers who are comfortable with using drama and dance strategies to teach elementary language arts.* Throughout both the AFWRP and ALA projects, it has become increasingly apparent that one way to ensure the likelihood of greater project success would be to select teachers who are conversant with the drama and dance strategies or not intimidated about learning and using them. The teachers in all the four ALA schools agreed to participate in the project, but their levels of enthusiasm varied considerably, often depending on their familiarity with dance and drama and their comfort levels in learning the strategies in groups and in teaching their students. We propose that future implementation of ALA recruit only volunteer teachers who (a) are comfortable in receiving training in drama and dance strategies, (b) have no qualms about practicing the strategies with fellow teachers during training, and (c) welcome being observed when they use the strategies to teach in the classroom. This approach would preclude whole-school implementation and probably be less cost-effective, but is the most likely to show effects.

3. *Continue to refine the theory underlying the project and the practices of the trainers and mentors with the guidance of language arts experts.* We believe that the project can benefit from additional expertise in the theory and practice of teaching language arts. The project has had the able assistance of a nationally recognized arts-education expert, and experts on theory and practice of reading comprehension were consulted during the years of ALA. Given the manner in which ALA strategies are intertwined with everyday language instruction, we recommend that local experts be available regularly for close consultation. They can help ensure that the project methods address sound teaching theory and reflect good teaching practices. We also suggest that the experts consider whether there is a basis to think that using the arts strategies to teach language arts is most likely to be successful with older elementary children. We have no theoretical foundation for asking this question—only a hunch that the cognitive development of children might preclude younger children from being affected by the strategies as much as older children. In addition, the project should consider developing training procedures for mentors—a feature that the ALA project team has recognized is lacking and has sought to remedy with new funding.

4. *Devote additional resources to providing long-term assistance to the teachers.* The teachers' responses to the project-wide questionnaire and some of their comments in the case study interviews showed that some of the teachers continue to need additional mentoring. If ALA personnel continue to disseminate the project, we suggest that they endeavor to find the

resources to provide face-to-face mentoring to the teachers or perhaps to develop and provide online videos of good use of the strategies.

5. *In future research studies, measure teachers' overall teaching quality independent of their use of the strategies and include student motivation or other attitudinal variables as outcome or mediator variables.* A significant confounding variable, when interpreting the results of any PD study is the degree to which the quality and level of classroom implementation of a PD project is due to the teachers' overall pedagogical knowledge and teaching skills and the degree to which they are due to the effects of the PD. Without knowing overall teaching ability, it is difficult to know how much PD affects teachers. The interviewer comments in the evaluation reported here show that the teachers with the best, most frequent, and most enthusiastic use of the strategies tended to be those with the best teaching skills. It remains unknown how much these skills affect the use of the strategies, but we are inclined to think that they did—considerably. Therefore, in the interest of validly attributing teachers' skills to the project, vs. to their overall teaching ability, future research and evaluation methods should include measurement of the teachers' overall teaching skills, ideally with enough classroom observations to ensure observation reliability and generalizability. Furthermore, we recommend that future studies include a measure of student motivation to learn, or a similar attitudinal measure, as an outcome variable or as a mediator variable (i.e., a variable that is both affected by ALA and that affects student achievement itself), although only if the project targets students in Grade 5 or above. We found some effects of using the arts strategies on fifth-grade students' attitudes toward school in the AFWRP project. We chose not to measure attitudes in the ALA study because we knew from AFWRP that there was little variation in the participating children's attitudes before Grade 5. However, we have come to think that children's attitudes or motivation to learn might be a critical variable in the study. It is being examined in a dissertation in Spring 2011; the findings of the dissertation will help ALA personnel whether to include it as an evaluation measure in future studies.

REFERENCES

Anderson, J. R. (1990). *Cognitive psychology and its implications.* New York: Freeman.

Brandon, P. R., Lawton, B. E., & Krohn-Ching, V. (2007). *Evaluation of the final year of the ARTS FIRST Windward Research Project.* Honolulu: University of Hawai'i at Mānoa, Curriculum Research & Development Group.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*, 32–41.

Collins, A., Brown, J. S. & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honor of Robert Glaser* (p. 453–494). Hillsdale, NJ: Erlbaum.

Craik, F. I. M. (2002). Levels of processing: Past, present . . . and future? *Memory, 10*, 305–318.

Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11*, 671–684.

Craik, F. I. M., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General, 104*, 268–294.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*, 181–199.

Hawai'i Arts Alliance. (2007). *An essential arts toolkit for K-5 classroom teacher: Hawai'i fine arts grade level guide* (2nd ed.). Honolulu: Author.

Little, J. W. (1990). The mentor phenomenon and the social organization of teaching. *Review of Research in Education, 16*, 297–351.

McMaster, J. C. (1998). 'Doing' literature: Using drama to build literacy. *Reading Teacher, 51*, 574–584.

Pressley, M. (1976). Mental imagery helps eight-year-olds remember what they read. *Journal of Educational Psychology, 68*, 355–359.

Pressley, M. (1977). Imagery and children's learning: Putting the picture in developmental perspective. *Review of Educational Research, 47*, 585–622.

Root-Bernstein, R. S., & Root-Bernstein, M. M. (1999). *Sparks of genius: The 13 thinking tools of the world's most creative people*. Boston: Houghton Mifflin.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference.* Boston: Houghton Mifflin.

U. S. General Accounting Office. (1990). *Case study evaluations.* Washington, DC: Author.

Wang, J., & Odell, S. J. (2002). Mentored learning to teach according to standard based reform: A critical review. *Review of Educational Research, 72*, 481–546.

Wilhelm, J. D. (2008). *"You gotta BE the book": Teaching engaged and reflective reading with adolescents* (2nd ed.). New York: Teachers College Press.

APPENDIX A

EVALUATION METHODS

EVALUATION METHODS

In this appendix, we present a detailed description of the evaluation methods for the technically sophisticated reader. The summary provided in the narrative body of the report is intended to be sufficient for the lay reader.

The data-collection methods described in this appendix include the teacher questionnaire, teacher log, teacher interviews, classrooms observations, and student reading comprehension test. The questionnaire was distributed to all ALA teachers at the four participating schools; the four remaining methods were used solely as part of the seven-teacher case study.

The results of the evaluation are presented in the body of the report.

TEACHER QUESTIONNAIRE

Purpose

One of the two primary purposes of the final-year evaluation was to collect data about all participating teachers' perceptions and use of the ALA strategies. The teachers had been trained in using the strategies at least two years earlier, thereby allowing us to learn about their perceptions and implementation of the strategies after a substantial period of use. To collect the data, we modified the annual questionnaire that we had used the previous year. A copy of the questionnaire is shown in Appendix B.

Instrument Preparation and Data Collection

The 2009–2010 questionnaire included six rating-scale items in Part A about the teachers' overall views of the strategies, 12 rating-scale items in Part B about the frequency of their use of the strategies (6 about *how many times* and 6 about *how often*), and 11 rating-scale items in Part C about their opinions about the effectiveness of the strategies. The instrument also included items about the teachers' background, the support the teachers received from the schools, and other aspects of school context. The teachers were also asked to provide written comments. (A final set of rating-scale items about the criteria that were used for the evaluation's formal classroom observations was also included; the results on these items will be reported in a forthcoming dissertation.) Given that most of the items had been used in previous years, no pilot-testing was conducted. A copy of the final version of the instrument is shown in Appendix B.

The questionnaire was distributed online in May of 2010 and again in August to the teachers who did not initially respond. Of the 74 teachers who had participated in the project and who remained at the schools, a total of 70 responded, for a response rate of 95%—unusually high for a teacher survey.

Analysis

The data collected online were transferred to a spreadsheet and entered into a SAS dataset for analysis. We replaced the few missing data (4% of the total possible) with mean values. (This is no longer the preferred method for replacing missing data—missing data algorithms are currently recommended in the literature on handling missing data—but it was sufficient for the small dataset and simple analyses of this study.) Negatively-stated items were reverse-scored, and total scores were calculated for the teachers' overall views about the strategies (Part A of the questionnaire), their reports of how often they used the strategies (the first six items of Part B), and their opinions about the effectiveness of the strategies (Part C, which we call the *Effectiveness Scale*). We report the results on the six items for *how often* the teachers used the strategies but not on the six items for *how many times per week* (the second half of Part B) because we believe that the response scale for the latter set of items was inadequate. Coefficient alpha for Part A was .73, for the first six items on Part B was .76, and for Part C was .96. We pay the closest attention to the results for the Effectiveness Scale because of its high reliability.

Mean total scale scores were compared among the four participating ALA schools in analyses of variance. No significant differences were found; therefore, we report the results (numbers of respondents, mean total scores, standard deviations, and standard errors of the mean) for the entire group of teachers together. We also present correlations among selected variables and present the teachers' written comments verbatim.

LOG

Purpose

A key component of the case studies was data collection with a log for the teachers to record their use of the strategies. Log data allowed us to track the extent to which the teachers used the six ALA teaching strategies. A copy of the instrument is shown in Appendix B.

Instrument Preparation and Data Collection

All seven case study teachers agreed to complete logs about strategy use during their participation in the case study. A majority expressed a wish to complete paper versions instead of the online version that we had used in previous years' evaluations. To ensure that the log forms were a minimal burden to the teachers, we prepared a form that asked them to record their strategy use only weekly. The log form, shown in Appendix B, asked for the number of times that they used each of the six ALA strategies and the reasons for the use. Teachers were given a binder with sufficient copies of the form for the 19-week period that began in January, 2010. We reminded them to complete logs via regular e-mail messages. The log binders were collected at the end of the school year.

Analysis

The data on frequency of use were recorded on spreadsheets and entered into SAS datasets for analysis. The analysis focused on the use of the three most complex strategies (Tableau, Snapshot, and Expressive Movement), which are thought most likely to affect student achievement. We calculated the mean number of times each of these strategies were used per week, standardized the scores for the three strategies so as to make them comparable with the results on other case study teacher variables, and calculated a mean use score.

Further analysis of the results is described in the final section of this appendix ("Case Study Analyses").

INTERVIEWS

Purpose

The second instrument used to collect data about the case study teachers was an interview. The purpose of this instrument was to collect rich data about the teachers and their use of the strategies, with the intent that the data would help the evaluation team understand the data collected with the other case study methods. A copy of the interview guide is given in Appendix B.

Instrument Development and Data Collection

The evaluation team conducted interviews of the seven case study teachers in the spring of 2010. An experienced K–12 teacher and administrator was contracted to conduct the interviews. To prepare for the interviews, the evaluators briefed the interviewer on the project in several discussions and provided project descriptions and the reports of previous evaluations for the interviewer to review.

The team prepared an interview guide that was designed to collect rich information about the teachers' comfort in using the ALA strategies and how they used the strategies when planning, teaching, and assessing student understanding, as well as general questions about the teachers' use of the strategies. A draft of the interview guide was prepared and iteratively reviewed and revised by members of the evaluation team, including the contracted interviewer. The guide included a brief description of the project, instructions for setting up and conducting the interview, and a written script. The evaluators shared the interview guide with the ALA project director, received her feedback, and made a few revisions. The final version of the guide is shown in Appendix B.

The interviewer contacted the case study teachers and arranged for interview dates and times that fitted the teachers' schedules. Each interview was video-recorded by a member of the evaluation team. The interviewer was told to follow the script as closely as possible with the

latitude to engage the teachers on topics that they found worthy of extensive discussion. None of the interviews addressed all the questions on the interview guide, but in all cases, it was deemed that sufficient information was gained about the teachers' use of the strategies. The evaluation team member who video-recorded the interviews contributed follow-up questions when appropriate and necessary for eliciting the teachers' elaborations on responses to questions that had been only partially addressed earlier in the interview. The interviews ranged in length from 55 to 87 minutes (mean = 66). Following each interview, the recorded video of the session was transferred to a computer file.

Analysis

To summarize the interviews, the member of the evaluation team who had attended and videotaped six of the seven sessions transcribed the interview results. Not every word was transcribed but the salient comments were copied verbatim, resulting in a total of 70 pages of transcriptions. The evaluation team member summarized the transcribed interviews in a journalistic-style format that focused on the key points raised by the teachers and delved deeply into the key points as the summaries progressed. The summaries, shown in Appendix C, formed the basis of our interpretation of the interview findings, supplemented slightly by some informal observations of the interviewer.

To help the reader get a complete picture of the interview results, a member of the evaluation team clustered the interviews into themes. The interviews formed a total of 105 clusters of comments. The clusters were categorized by teacher, and a table showing the themes for each teacher was prepared.

OBSERVATIONS

Purpose

To examine the quality of implementation of the arts strategies in the classroom, observations were conducted of the seven case study teachers. The observation guide is shown in Appendix B.

Instrumentation and Rater Training

All the observations were conducted using the Quality of Program Implementation (QPI) observation protocol, which was developed in the previous grant (Brandon, Lawton, & Krohn-Ching 2007) and refined during the years of the ALA project. A copy of the QPI is provided in Appendix B.

For the 2009–2010 evaluation, two new raters, both on the evaluation team, participated in the observation ratings. The new raters were trained early in 2010. After the raters read written descriptions of the QPI, the ALA project manager met with them and explained the criteria. The

manager and the two new raters observed a video of an observation session from the previous year. The two raters rated additional videos, compared their ratings, and reconciled differences in the ratings. Finally, the new raters viewed seven live sessions while continuing to compare ratings and reconcile differences. Across all seven observations, the average difference in pre-reconciliation ratings among the two raters was 1.0 on a 5-point scale. The correlation among ratings across all criteria and lessons was .75. The correlations within criteria across all lessons ranged from .00 to .95. The lack of correlation for the one criterion (No. 6) was due in large part to the fact that the behavior reflected by the criterion was often not observed. These consensus and consistency results were lower than for the previous years in which the QPI was adminis-tered, probably due to the fact that previously only the ALA project manager and artist mentors had participated as raters. Therefore, the ratings for the seven preliminary rating sessions were not used in the analysis of the observation results.

Data Collection

A total of 15 post-training classroom observations was conducted over a period of about 2½ months. Of the seven teachers, three observations were conducted of four teachers, two observations were conducted of four teachers, and one was conducted of one teacher, for an average (mean) of 2.14 observations per teacher. The two evaluation-team raters, the ALA project manager, and an artist mentor who had conducted observations earlier in the ALA project and who also had helped develop the QPI in the previous grant, served as observer/raters. (A second artist mentor rated a few observations, but that mentor had not been as involved as others in the rater training or observing, resulting in less reliable ratings. Therefore, the second mentor's ratings were not used in the analysis.) The number of raters per observation ranged from two to four; the mean was 3.2. All the observations were conducted live except for those of the artist mentor, who rated recordings of the observations.

FACETS Analysis

The ratings of the 15 post-session observations were analyzed using FACETS software (Linacre, 2010). FACETS produces a *Rasch model* that adjusts for differences in difficulty among raters and criteria, therefore producing data that can be considered more fair than the raw scores. If two teachers with the same "true" QPI ability are judged by raters or items that differ in their severity, their raw scores will differ: A teacher rated by a severe rater on a difficult item will receive a lower raw score than a teacher of the same true ability rated by a lenient rater on an easy item. FACETS adjusts for this difference by placing all "facets" (in this case, teachers, raters, and criteria) on the same scale using the natural log of the odds (a logit score). Each teacher's QPI score (logit score) is calculated using the formula

$$\ln(P_{nrik}/P_{nrik-1}) = \theta_n - b_r - c_i - d_k ,$$

Table A-1. *Descriptive Statistics for the Facets in the Multi-Facet Rasch Model**

	Teachers	Raters	Criteria
Mean logit score	0.20	0.00	0.00
SD	0.36	0.06	0.01
N	7	4	6
Range	-0.35 to 0.74	-0.09 to 0.06	-0.56 to 0.28

*Raters and criterion items are centered around zero; the teacher estimates were allowed to float.

where n represents the teacher, r the rater, i the criterion item, and k the score on the 1–5 criterion scale and where P_{nrik} is the probability that teacher n with a QPI ability θ (the estimated true ability) will get a QPI score of k given a rater severity of b, and a criterion difficulty of c. The d_k represents the difficulty in moving from score k-1 to k on the five-point scale. The QPI logit score, $\ln(P_{nrik}/P_{nrik-1})$, can be thought of as an interval scale from $-\infty$ to ∞. FACETS also provides information for evaluating the quality of the QPI instrument in scoring teachers based on the behavior of raters and criterion items.

Because not every rater was able to observe evidence of every criterion in some lessons, some ratings were left blank, resulting in 23 missing data (8% of the total 288) and 265 data-points for analysis. In Table A-1, we provide descriptive statistics for the facet logit scores. Based on the FACETS output, the data fit the Rasch model. Of the 265 scores, only eight (3%) were reported as unexpected by FACETS; the remaining 258 scores had standardized residuals less than 1.96.

Teachers, raters, and criteria on the same scale. Figure A- 1 is a map of the facets on the same logit scale. Teachers with high QPI estimates are located near the top of the vertical scale. Raters who are located near the bottom of the scale are more lenient, and criteria at the bottom of the scale are easier met. This map shows that raters and items are lower on the scale, indicating they were slightly easy for teachers. This trend is also represented in Table A-1, where the mean logit score of teachers is positive (0.20) compared to the other two facets (raters and criteria, which were centered around zero).

Reliability of separation. FACETS calculates a reliability of separation index for each facet that indicates how many distinct levels are detected in a facet, given the standard error. The indexes listed in Table A-2 indicate that there were over three distinct levels of teachers that the model reliably estimated (separation = 3.50). The six criteria also differed in their difficulty levels and were reliably separated into over three levels (separation = 3.88). Raters, however, were not reliably separated into different levels (separation = 0.00), suggesting that raters did not
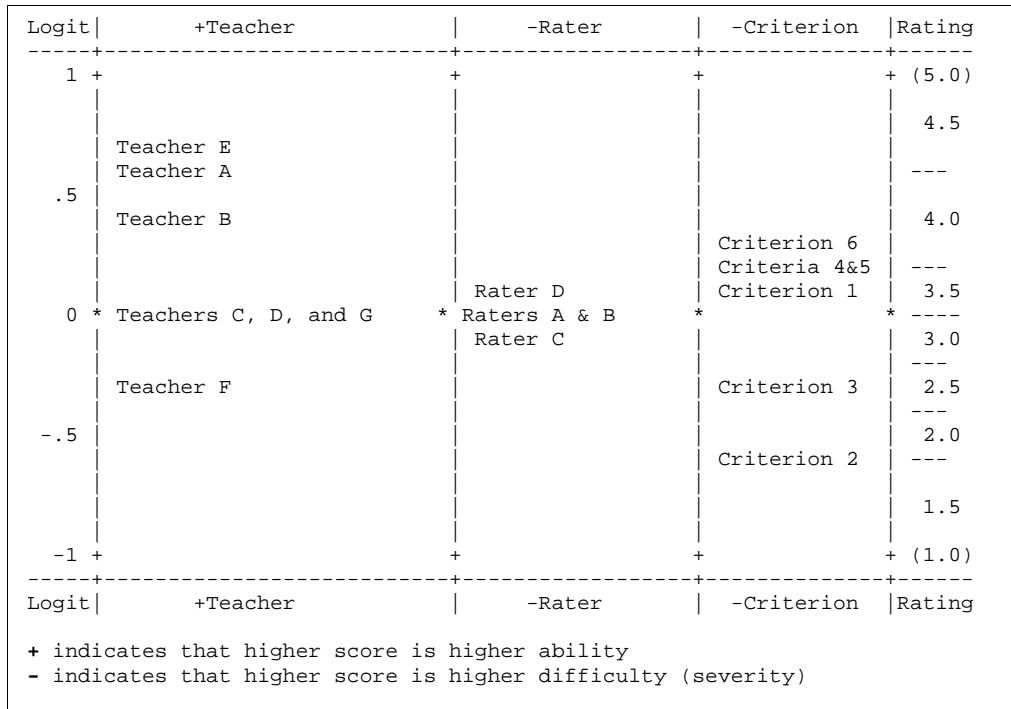
```
Logit|      +Teacher            |    -Rater       |  -Criterion   |Rating
-----+-------------------------+-----------------+--------------+------
  1 +                          +                 +              + (5.0)
     |                          |                 |              |
     |                          |                 |              |  4.5
     | Teacher E                |                 |              |
     | Teacher A                |                 |              |  ---
  .5 |                          |                 |              |
     | Teacher B                |                 |              |  4.0
     |                          |                 | Criterion 6  |
     |                          |                 | Criteria 4&5 |  ---
     |                          | Rater D         | Criterion 1  |  3.5
  0 * Teachers C, D, and G      * Raters A & B    *              * ----
     |                          | Rater C         |              |  3.0
     |                          |                 |              |  ---
     | Teacher F                |                 | Criterion 3  |  2.5
     |                          |                 |              |  ---
 -.5 |                          |                 |              |  2.0
     |                          |                 | Criterion 2  |  ---
     |                          |                 |              |
     |                          |                 |              |  1.5
     |                          |                 |              |
 -1 +                          +                 +              + (1.0)
-----+-------------------------+-----------------+--------------+------
Logit|      +Teacher            |    -Rater       |  -Criterion   |Rating

 + indicates that higher score is higher ability
 - indicates that higher score is higher difficulty (severity)
```

Figure A- 1. Map of the teachers, raters, and criteria on the measurement scale.

differ in their degree of severity.

Variance in the data. FACETS does not report variance components, but because the standard deviations of each facet are on the same scale, percent of variance of each facet can be calculated (Table A-2). Nearly all of the modeled variance (97%) in the data was due to differences among teachers, while that among raters (3%) and criterion items (0%) were very small. This suggests that the model was functioning well in estimating the quality of the teachers' use of the strategies. Little variance in teachers' QPI estimates was due to differences

Table A-2. *Facet Separation Values, Variances, and Standard Error Estimates**

Facet	Separation index	Variance	Percent of variance	SE
Teachers	3.50	0.130	97.40%	0.096
Raters	0.00	0.003	2.52%	0.068
Criterion items	3.88	0.000	0.09%	0.078
Total		0.133	100.00%	0.242

*Raters and criterion items are centered around zero, while teacher estimates were allowed to float. Error variance was not included in the model.

Table A-3. *Teachers' QPI scores as Estimated by the Rasch Model**

Teacher	Fair score	Logit score	Logit SE	Standardized fit index
A	4.26	0.60	0.10	0.05
B	3.98	0.38	0.09	0.20
C	3.17	-0.02	0.07	1.38
D	3.21	0.00	0.07	-0.32
E	4.40	0.74	0.17	0.60
F	3.26	0.02	0.08	-0.87
G	2.28	-0.35	0.09	-1.77

*The fair score is on the one-to-five point scale; the logit score is $\ln(P_{nrik}/P_{nrik-1})$. A standardized fit score greater than 1.96 would indicate that a teacher's QPI rating was scored in a way that did not fit the Rasch model.

among raters and items.

Teachers' QPI scores. In Table A-3, we report the teachers' QPI scores on the logit scale and their transformations back to the original five-point scale (fair score). The mean QPI score of the seven teachers was higher than the 3.0 midpoint on the one-to-five point scale ($M = 3.51$, $SD = 0.69$). The range of the estimates of teachers' scores was 2.28 to 4.40. The Rasch reliability (equivalent to Cronbach's α) of estimating teachers' scores was .92, indicating that the raters were using the criteria consistently in rating teachers. None of the teachers showed unexpected fit indices (i.e., none were greater than 1.96 on the standardized scale), supporting the use of the multifaceted Rasch model in explaining all teachers' quality of implementation of the ALA strategies.

Raters. All four raters were estimated to have adequately fit the model. None of the standardized fit indices exceeded +1.96. (See Table A-4.) This is important because it indicates that the four raters were consistent with each other in their use of the criteria in judging the teachers. There was no evidence that the raters differed from each other in their degree of severity. This is indicated by a separation index of 0.00 and a non-significant chi-square test of the hypothesis that the four raters differ in severity ($X^2(3) = 3.5$, $p = 0.32$). There was an exact agreement among raters on 32.2% of the ratings, indicating that raters exactly agreed in their judgments of teachers' quality of implementation approximately one-third of the time.

FACETS allows for modeling of bias between facets. Examination of potential bias between raters and teachers revealed no evidence suggesting any rater was overly severe or

Table A-4. *Rater's Severity Locations*

Rater	Logit score	Logit SE	Standardized fit index
A	0.04	0.05	0.18
B	-0.01	0.09	-0.38
C	-0.09	0.07	1.27
D	0.06	0.06	-1.62

lenient toward any teacher. No rater-by-teacher interaction was significant at $p < 0.05$, and the null hypothesis that all possible rater-by-teacher judgments come from the same population was not rejected ($X^2(27) = 33.40$, $p = 0.18$).

Examination of the bias between raters and criteria similarly revealed no evidence that raters were using the criteria in any biased manner. No rater-by-criterion interaction was significant at $p < 0.05$, and the null hypothesis that all possible rater-by-criterion judgments come from the same population was not rejected [$X^2(24) = 19.40$, $p = 0.73$].

Criterion items. None of the standardized fit indices exceeded 1.96 (Table A-5), suggesting the criterion items are tapping into the same construct. The model indicated that the criterion items likely differed from each other in difficulty ($X^2(5) = 79.20$, $p < 0.01$). A separation index of 3.88 suggests that the six criteria represented three separate levels of difficulty in estimating the teachers' QPI scores. The range of difficulty, from -0.56 to 0.28 on the logit scale, was narrower than that of the teachers. Criterion two was the easiest (logit score = -0.56) and the

Table A-5. *Criterion Item Difficulties*

Criterion	Logit score	Logit SE	Standardized fit index
1	0.10	0.07	-0.02
2	-0.56	0.10	-1.22
3	-0.30	0.08	-1.41
4	0.25	0.07	1.07
5	0.24	0.07	0.10
6	0.28	0.08	1.62

least precise (SE = 0.10); the variable map in Figure A- 1 shows that this criterion was easier than all of the teachers' levels of QPI, suggesting it provides the least amount of information among the six criteria.

Examination of the bias between criteria items and teachers revealed no evidence that the criteria were unfair toward any one teacher. Only one criterion-by-teacher interaction was significant at $p < 0.05$, representing only 2% of the 47 possible interactions. The null hypothesis that all possible criterion-by-teacher ratings come from the same population was not rejected $(X^2(42) = 56.60, p = 0.07)$.

READING COMPREHENSION TEST

Purpose

To examine the effect of the ALA strategies on students' reading comprehension, selections of items from the reading comprehension section of the Stanford Achievement Test (SAT-10) were administered. The selected items were in two sections: One section was intended to measure students' reading comprehension of a passage that the teachers had taught using ALA one day before the test, and the second section was intended to measure reading comprehension on a passage which the students had not encountered before. The first passage was the primary concern of the evaluation team. Its purpose was to examine the effect of ALA on students' comprehension of a reading passage that they had been taught with the ALA strategies. The purpose of the second section was to examine whether there were any differences in general reading achievement between the treatment group (the students of the case study teachers) and a comparison group of students.

Comparison Group Selection

For each case study teacher, the project team identified a comparison group teacher. (We use the term *comparison group* instead of the common term *control group* because the latter implies a randomly selected group and the former implies a group selected non-randomly.) There was a total of 13 teachers—7 case study teachers and 6 comparison teachers (one of whom was matched with two case study teachers). The comparison group teachers taught the same grade as the case study teachers but, despite our intentions, were not all at the same school as the case study teachers. At one school, one teacher served as the comparison group for two teachers, and at another school, the case study teachers taught all the students in their grades; therefore, two teachers from a different school were selected as comparisons for these two teachers. This was not an ideal design due to the likelihood of differences between schools in instruction and context. Furthermore, all the comparison teachers had participated in ALA, thereby perhaps contaminating the comparison somewhat.

Instrument Preparation

The project and evaluation team selected passages from the reading comprehension section of the SAT-10 and created three shortened, 12-item versions of the test, one for each grade. For each grade, the evaluation and project team selected two passages to include on the post-instruction test. To reduce the likelihood of a ceiling effect due to instruction, the selected passages were from tests one grade higher than those of the students. Among the nine SAT-10 reading prompts available in the reading comprehension sections, passages were selected based whether they had a title, contained at least three paragraphs, and were narrative or expository in style. These criteria eliminated poems, advertisements, and school posters from our selection. The passages meeting these criteria were ranked according to content and the skills they measured. Passages with items measuring higher order thinking skills such as understanding of the main idea, inference-making, and prediction were ranked highest. The two top ranking passages were included in the post-instruction test. Each passage was followed by six four-option multiple-choice comprehension questions. Thus, each grade's test consisted of two passages (a taught passage and a not-taught passage) and 12 items.

Data Collection

The evaluation team distributed the reading-passage materials on which the students were to be tested to the teachers two weeks before the scheduled teaching date. For each matched pair (case study and comparison) of teachers, both teachers were asked to share with each other ideas about the content of their lessons—that is, which aspects of reading they planned to teach, such as the author's message, etc. They were instructed to address the same aspects as their counter-parts in their lessons. The case study teachers were instructed to use the ALA strategy or strategies that they found suitable. The comparison teachers were instructed to teach the passage without using the ALA strategies. We provided an instruction sheet and a copy of the reading passage for each student. This instruction sheet asked the teacher to teach the passage only during the allotted lesson time and to collect the passage afterward so that individual students did not study it on their own. It also asked teachers to report how many students were present, how long the lesson took, whether there were any disturbances, what they did during the lesson, as well as any concerns they had about the lesson.

The evaluators assembled and distributed packets with materials for the testing session in sealed envelopes. Teachers were asked to open the envelope on the day of the test. The packet included a cover sheet, with a checkbox for the teacher to complete for students who were absent during the teaching session; directions for test administration, following the original script of the SAT-10 administration directions as much as possible; and a sheet for recording how many students were present, how long the test took, whether there were any disruptions, how many

students had not received the teaching session, and teachers' comments, if any. The teachers were asked to administer and collect the tests and place them immediately in the return envelope, sealing it. The teachers reported no unusual circumstances during the teaching or testing sessions.

Analysis

The evaluation team entered the students' answers to the multiple-choice items into a computer spreadsheet, proofed the data entry, and used SAS software to score the items as correct or incorrect.

Each case study teacher was compared to their comparison teacher using independent *t*-tests in SAS. The primary analysis was of the differences between each case study teacher and her respective comparison teacher on the items measuring students' comprehension of the reading passage that the ALA teachers taught for the study. The alpha level was set at .10 to help compensate for lack of statistical power due to the small number of items (six points possible).

The differences between the results on the items that measured student comprehension of the reading passages that were not taught before testing were also examined with *t*-tests. The purpose of this part of the analysis was to identify substantial differences, if any, between the two groups. No differences were found. The not-taught passage score was also used as a covariate in an analysis of the taught-passage score; no effects were found. We do not report further results for the not-taught passage.

CASE STUDY ANALYSES

For the case study summaries of the data from the multiple instruments, we began by selecting a mix of data from the various evaluation instruments with the intent to balance as much as possible the biases inherent in the methods. We limited our analyses to the data that exhibited high or adequate psychometric quality, resulting in five primary sets of data, four quantitative and one qualitative:

1) The observation data were the first of our three sets of quantitative results. The observations ratings are psychometrically sound (see Appendix A), address aspects of the program quality that the project staff believe to be most important for effective implementation, and reflect intensive first-hand examinations of ALA in practice.

2) The Effectiveness Scale total score is the second of our primary sets of case study results. These data reflect the seven teachers' perceptions of the effectiveness of the ALA strategies. They were collected with carefully-crafted items that had been refined over multiple years. Of the three scales on the questionnaire, the effectiveness data showed the highest internal consistency reliability (see Appendix A).

3) The log results constitute our third set of quantitative data. In contrast to the observations, which were useful for examining the quality of implementation, the logs were useful for examining how many times a week the teachers implemented the strategies. Some of the log data are more critical than others, however. We focused on the teachers' reports of the use of Snapshot, Tableau, and Expressive Dance—the three ALA strategies that the project and the evaluation team believe are the most likely of the total set of six strategies to affect student reading comprehension. To give the three types of log data their proper emphases in the analyses, we weighted them by multiplying (a) the mean weekly use of Snapshot by 2, (b) the mean weekly use of Tableau by 3, and (c) the mean weekly use of Expressive Dance by 4. We used the sums of these weighted results for our log data. The sums correlate strongly with the case study teachers' questionnaire Effectiveness Scale total scores ($r = .74$) and with the teachers' total score on their year-end questionnaire ratings of how often they used all the strategies ($r = .64$), thus providing validity evidence supporting our decision to use the weighted log results.

4) The results of the in-depth teacher interviews provide insights into how and why the teachers used the strategies, the contexts within which they were used, and the teachers' opinions about the effectiveness of the strategies. (Full summaries are given in Appendix C.) These qualitative data provided the meat to put on the bones of the results of the quantitative data.

5) The reading comprehension results constituted our final set of quantitative data. We report these project- outcome results separately from the other three quantitative project-imple-mentation results.

Selecting the results to use for the case study summary analyses was only the beginning of our decision making about analyses, however. The challenge of making sense of the disparate mix of quantitative and qualitative data remained. One approach to the analyses would be to present seven separate summaries of the teachers, drawing from each of the data sources for the purpose of providing in-depth teacher profiles. Another approach, which we chose, is to identify patterns or similarities among the teachers and develop profiles of ALA implementation. We adopted the latter approach because we believed it would provide the deepest look at implemen-tation in the most succinct manner. Toward that end, we calculated average (mean) scores on the three quantitative instruments (the observations, the log, and the Effectiveness Scale) and standardized the averages (mean = 0, standard deviation = 1). The purpose of the standardization was to put the results for the three instruments on the same scale, thereby making them more interpretable. Then we assigned symbols to the results. The symbols are intended to provide an overall picture of the results for the seven teachers, similar to the ratings presented in *Consumer*

Reports, thereby facilitating our interpretation of the teachers' implementation of the strategies. We recognize the measurement limitations inherent in a small dataset (a small number of data points for a small sample) and present the results in a manner suitable for identifying types of teachers.

The final step in our quantitative analysis of the observation, Effectiveness Scale, and log results was to enter the standardized mean scores on the three variables for the seven teachers into a cluster analysis. Cluster analyses are useful for helping to make sense of small datasets on variables of different types of measurement. We used SAS PROC CLUSTER with the Ward method of clustering. With such a small dataset, the results are merely suggestive, and we treat them as such.

To help us make sense of the quantitative analyses, we summarized the interview results by identifying themes that we found across interviews. A member of the evaluation team categorized the comments into 13 categories, discussed the categories with others on the evaluation team, and prepared results showing which teachers made which comments. The categories fell into two super-categories, one having to do with the teachers' perceptions about the effects of ALA as a teaching and learning tool and the other having to do with contextual issues affecting the implementation of the ALA strategies. An independent categorization of the interview comments by another member was not conducted.

REFERENCE

Linacre, J. M. (2010). *Facets Rasch measurement computer program* (Version 3.67.0) [Computer Software]. Chicago: Winsteps.com.

APPENDIX B

EVALUATION INSTRUMENTS

**University of Hawai'i at Mānoa
Curriculum Research
& Development Group**

Teacher Questionnaire
Arts and Literacy for All (ALA) Research Project
Spring 2010

Instructions: As you know, evaluators at the University of Hawaii at Manoa have been evaluating the Arts and Literacy for All (ALA) project. The purpose of this questionnaire is to learn about your use of the ALA arts strategies in your teaching during the project's final year. It is *not* to evaluate you in any way. All responses will be scored anonymously. (But, to ensure that everyone responds, we do keep track of who has completed it.) Please complete this questionnaire within the next two days. It will take approximately 10 minutes to complete. *Thank you for your help!*

Please tell us which grade you teach:

Part A.
Your Views toward the ALA Arts Strategies

This part of the survey asks for your views toward teaching with the ALA arts strategies. Please complete each item below by selecting one number, where 6 = *strongly agree* and 1 = *strongly disagree*.

	Strongly Agree (6)	(5)	(4)	(3)	(2)	Strongly Disagree (1)
1. I think using the ALA arts strategies when teaching helps children learn reading.	○	○	○	○	○	○
2. I am concerned that ALA strategy activities are *too noisy or disruptive* for the classroom.	○	○	○	○	○	○
3. I have enough space to use ALA strategies effectively in the classroom.	○	○	○	○	○	○
4. My students *have trouble*						

concentrating on other work after I use the ALA strategies to teach.

○　○　○　○　○　○

5. I am confident in my ability to facilitate ALA activities.

◉　◉　○　◉　○　◉

6. I think there are many students in my class who benefit from the ALA activities.

○　○　○　○　○　○

7. Comments (if any):

Please click on the Next button to go to the next section.

Next

Part B.
Your Use of the Arts Strategies

We would like to know about your overall use of the ALA arts strategies this year. Please complete each item using the scales provided.

In general, how *often* did you use each of these strategies this school year:

	Very frequently (5)	Often (4)	Sometimes (3)	Not very often (2)	None of the time (1)
1. Domino	○	○	○	○	○
2. Echo	○	○	○	○	○
3. Mirror	○	○	○	○	○
4. Snapshot	○	○	○	○	○
5. Tableau	○	○	○	○	○
6. Expressive Dance	○	○	○	○	○

How many times a week **did you use each of these strategies this school year:**

	0	1	2	3	4	5	6 or more
1. Domino	○	○	○	○	○	○	○
2. Echo	○	○	○	○	○	○	○
3. Mirror	○	○	○	○	○	○	○
4. Snapshot	○	○	○	○	○	○	○
5. Tableau	○	○	○	○	○	○	○
6. Expressive Dance	○	○	○	○	○	○	○

Please click on the Next button to go to the next section.

Back   Next
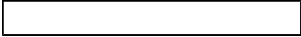
Part C.
Effectiveness of the ALA Arts Strategies

To what extent...

	Very much (5)	Quite a bit (4)	Somewhat (3)	Very little (2)	Not at all (1)	not using strategies
1. ...were the strategies useful in helping students understand difficult concepts in reading comprehension?	○	○	○	○	○	○
2. ...were the strategies valuable to you as a teaching tool?	○	○	○	○	○	○
3. ...were the strategies helpful to your students as a learning tool?	○	○	○	○	○	○
4. ...was the use of the strategies an efficient use of your pedagogical time?	○	○	○	○	○	○
5. ...will you continue to use the strategies once the project is complete?	○	○	○	○	○	○
6. ...do you believe that the strategies were effective enough to improve student reading achievement?	○	○	○	○	○	○
7. ...do you believe the strategies increased students' confidence in reading?	○	○	○	○	○	○
8. ...do you believe the strategies increased students' value of reading?	○	○	○	○	○	○
9. ...do you believe the strategies were used enough to have a positive effect on student reading achievement?	○	○	○	○	○	○
10. ...do you believe the strategies increased students' motivation to read on their own?	○	○	○	○	○	○
11. ...did the strategies help you teach students better?	○	○	○	○	○	○

12. Comments (if any):

Please click on the Next button to go to the next section.

Back   Next

Part D.
Your Views of the ALA Strategy Criteria

In the summer training and when working with the artist mentors, you were oriented with several quality criteria about teaching with the ALA project arts strategies. These criteria address (a) telling the students about the connection between the strategy and the lesson, (b) telling the students what they were expected to do in the strategy, (c) prompting the students to explore creatively during the strategy, (d) prompting the students to observe what their fellow students are doing during the strategy, (e) prompting the students to interpret what they think is expressed during the strategy, and (f) prompting the students to explain their understanding of the lesson's objective.

Please answer the following questions about these criteria openly and to the best of your knowledge.

The purpose of the questions is to learn more about your use of the criteria in your teaching; it is *not* to evaluate you in any way.

To what extent...

	Very much (5)	Quite a bit (4)	Somewhat (3)	Very little (2)	Not at all (1)	don't know or can't recall
1. ...were you trained in the criteria during PD sessions?	○	○	○	○	○	○
2. ...do you think the training you received in these criteria helped you improve your use of the strategies?	○	○	○	○	○	○
3. ...would you have liked more training and assistance in applying the criteria?	○	○	○	○	○	○
4. ...did you typically think about the criteria when you were teaching with the strategies this year?	○	○	○	○	○	○
5. ...were the criteria typically feasible to address when using the strategies?	○	○	○	○	○	○
6. ...do you think the criteria helped you focus on the most important parts of using the strategies?	○	○	○	○	○	○

7. ...do you think the criteria helped you in your regular classroom instruction when *not* using the strategies?

   ○   ○   ○   ○   ○   ○

8. ...were the criteria clear to you?

   ○   ○   ○   ○   ○   ○

9. ...were the criteria meaningful to you?

   ○   ○   ○   ○   ○   ○

10. ...were the criteria overall useful to you?

   ○   ○   ○   ○   ○   ○

11. Comments (if any):

[text box]

Please click on the Next button to go to the next section.

[Back]   [Next]

Part E.
<u>Professional and Educational Background</u>

1. How many years have you been a teacher ?

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┌─────────────────────────────┐
│                             │
└─────────────────────────────┘
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2. How many years have you taught the grade you're teaching now?

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┌─────────────────────────────┐
│                             │
└─────────────────────────────┘
```

3. What is your educational background? (Check all that apply.)

☐ **Bachelor's**   Major(s):
```
┌──────────────────────────────────────────┐
│                                          │
│                                          │
└──────────────────────────────────────────┘
```

☐ **Certificates**   Subject (s):
```
┌──────────────────────────────────────────┐
│                                          │
│                                          │
└──────────────────────────────────────────┘
```

☐ **Other Degrees**
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┌──────────────────────────────────────────┐
│                                          │
│                                          │
└──────────────────────────────────────────┘
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4. What professional development other than ALA (if any) have you participated in over the past five years and how extensive was it?

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┌──────────────────────────────────────────┐
│                                          │
│                                          │
│                                          │
│                                          │
│                                          │
└──────────────────────────────────────────┘
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Please click on the Next button to go to the next section.

Back   Next

Part F.
Support From Your Principal and Other Teachers

	Very much (5)	Quite a bit (4)	Somewhat (3)	Very little (2)	Not at all (1)	I do not know
1. To what extent do you think your current principal advocates your use of the ALA strategies?	○	○	○	○	○	○

2. Have you discussed the arts strategies with other teachers in the school?
- ○ Yes (please answer 2a - 2c)
- ○ No   (Go to Part G)

	Very much (5)	Quite a bit (4)	Somewhat (3)	Very little (2)	Not at all (1)
2a. How helpful have the discussions been to you?	○	○	○	○	○
2b. To what extent were you able to learn from other teachers?	○	○	○	○	○

2c. Do you think that other teachers learned from you?
- ○ Yes
- ○ No
- ○ I don't know

Part G
Any Comments You'd Like to Add about the ALA Project

3. Is there anything you would like to add about the ALA strategies?

Please click on the Submit button below when you have completed the survey.
Thank you for your time!

Back   Submit

Submission successful!

Thank you for your time.

ARTS LITERACY FOR ALL
QUALITY OF PROGRAM IMPLEMENTATION
OBSERVATION PROTOCOL

PURPOSE

This is a protocol for observing Arts and Literacy for All, a project of the Hawaiʻi Alliance for Arts Education that was funded by the Arts in Education Model Development and Dissemination (AEMDD) grants program of the United States Department of Education (Award No. U351D060016). The purpose of ALA was to train elementary-school teachers at four schools in how to use drama and dance to help teach reading instruction for four years (School Year 2006–2007 through 2009–2010). Faculty and staff at Curriculum Research & Development Group (CRDG) served as the evaluators of the project. The Quality of Program Implementation (QPI) observation protocol was developed during a previous grant and modified somewhat for the present study. Reliability and validity results are available from the authors upon request.

The QPI addresses six criteria:

1) The teacher communicates to the students the connection between the strategy and the lesson objectives.
2) The teacher communicates to the students clear instructions of what they are expected to do. (Where and how to begin and end in the strategy and what is required of them during each step, a review of the strategy, key components of the strategy.)
3) The teacher prompts students to explore creatively (e.g., "Consider another level."; "Use another part of your body."; "Do it slower and bigger next time."; "Do something you haven't done before.").
4) The teacher prompts students to describe what they observe other students doing (e.g., "What kind of shapes do you see?"; "What do you notice about the movement?").
5) The teacher prompts students to interpret what they think is being expressed (e.g., "How do you think the character is feeling now?"; "How is his or her body or expression communicating this?").
6) The teacher prompts students to articulate their understanding of the lesson objective (e.g., "What words can you use to describe the character's feelings?"; "What do you think will happen next?", "Why?")

QPI raters assign values of 1–5 on the form shown at the end of this document.

PREPARATION FOR THE OBSERVATION

1. At the school, each member of the observation team should check-in upon arriving and check-out when departing with the school office. Some schools require visitors to wear visitor badges while on campus.
2. To minimize disruptions while on campus, observation team members should gather in the

office and proceed as a group to the classroom.

3. Team members should seek locations within the classroom that will minimize their effect on the classroom environment while allowing each observer an unrestricted view of the interaction between teacher and students. All electronic devices which have ring tones, alarms, or other audio signals should be turned-off, placed on vibrate or on other inaudible alert function.

4. Each observer should have copies of the QPI Rating Form to use during the observation. The observer should be prepared to take notes of the teacher's implementation of the ALA strategies within the lesson. While observing the lesson presented in the classroom, the observer should note teacher behaviors and teacher-student interactions that occur during the lesson. The observer should pay particular attention to teacher behaviors and teacher-student interactions that are specifically identified within the implementation criteria.

5. Observers should note how the lesson begins, the sequence and pacing of the lesson, and how the lesson concludes.

6. The observation will last approximately 45 to 60 minutes.

7. The QPI Rating Form should be completed during or as soon as is practical after the observation concludes.

VIDEOTAPING PROCEDURES

During scheduled observations, videos are recorded to collect data documenting the teacher implementation of ALA strategies within the classroom environment, to use for validating the perceptions of classroom observers, or for raters who cannot view the live classroom. The primary focus of the videotape is the teacher actions during a lesson using the ALA strategies, the teacher-student interactions that result from the teacher actions, and the changes in teacher and student instructional interactions over the course of the series of observations.

1. The day before a scheduled observation, the videographer assigned to videotape the lesson should examine the camera, video card, microphones, tapes, batteries, and tripod to ensure that all equipment is ready for the observation session.

2. At the school, the videographer and other members of the observation team should check in upon arriving and check out when departing with the school office. Some schools require visitors to wear visitor badges while on campus.

3. To minimize disruptions while on campus, observation team members should gather in or near the office and proceed as a group to the classroom.

4. *Camera set-up*
   a. Set up the tripod.
   b. Check the camera setup for the battery, video card, and microphone level.
   c. Place the camera on the tripod and secure it.

5. *Video recording reminders*
   a. Be respectful of the teacher; you are her or his guest and also a guest of his or her students.
   b. Minimize contact with students or increasing distractions while class is in session (the camera and the presence of the observation team is already a distraction).
   c. Minimize background sounds, as these sounds might interfere with the teacher's and students' voices on the tape.

6. *Camera packing*
   a. Write the teacher's name, school, and date on the cassette immediately after taping has ended.
   b. Remove the batteries from the camera; segregate those that need charging from those that are still charged.
   c. Disassemble the accessories from the camera and return each piece of equipment to its location within the camera bag.
   d. Pack the tripod.
   e. Make a last check for equipment before leaving the classroom.
7. Thank the teacher for allowing the project to tape her or him and the lesson in the classroom.
8. Return the equipment to the proper custodian.
9. Deliver the video card of the completed observation to the research office.
10. Transfer the video from the card to an external drive.

Quality of Program Implementation Rating Form

Teacher: _____   Rater: _____   Date: _____

Type of observation (*check one*): ☐ Live classroom observation ☐ Review of videotape   Video code or title:_____

Criterion	Rating						Notes
	High	Medium		Low		N.O.*	
1. The teacher communicates to the students the connection between the strategy and the lesson objectives.	5	4	3	2	1	0	
2. The teacher communicates to students clear instructions of what they are expected to do. (where and how to begin and end in the strategy and what is required of them during each step, a review of the strategy, key components of the strategy).	5	4	3	2	1	0	
3. The teacher prompts students to explore creatively (e.g., "Consider another level."; "Use another part of your body."; "Do it slower and bigger next time."; "Do something you haven't done before.").	5	4	3	2	1	0	
4. The teacher prompts students to describe what they observe other students doing (e.g., "What kinds of shapes do you see?"; "What do you notice about the movement?").	5	4	3	2	1	0	
5. The teacher prompts students to interpret what they think is being expressed (e.g., "How do you think the character is feeling now?"; "How is his or her body or expression communicating this?").	5	4	3	2	1	0	
6. The teacher prompts students to articulate their understanding of the lesson objective (e.g., "What words can you use to describe the character's feelings?"; "What do you think will happen next?" "Why?").	5	4	3	2	1	0	

*Not observed

ARTS AND LITERACY FOR ALL RESEARCH PROJECT WEEKLY TEACHER LOG FOR 2010

Teacher name: _____

For week of (Monday's date):

_____

Strategy	Total number of times you used the strategy	Purpose(s) of strategy use
Domino – Passing a shape, movement, and/or sound, around a circle, one person at a time.		
Echo – The leader does a shape, movement, and/or sound. The follower(s) repeats the shape, movement, and/or sound.		
Mirrors – As the leader moves, the follower(s) mirrors the movement simultaneously.		
Snapshot – A frozen image created individually.		
Tableau – A frozen image created by two or more people.		
Expressive Movement – Using the elements of dance (body, energy, space, time) to communicate or represent an idea.		

ARTS AND LITERACY FOR ALL TEACHER INTERVIEW GUIDE:
TEACHER BACKGROUND AND UNDERSTANDING OF THE ARTS STRATEGIES

BACKGROUND FOR THE INTERVIEWER

This is a guide for interviewing a purposive sample of teachers who have participated in the Arts and Literacy for All (ALA) project. ALA is a project of the Hawai'i Arts Alliance funded by a grant from the U. S. Department of Education's Arts in Education Model Development and Dissemination (AEMDD) program. It is the Arts Alliance's second AEMDD project. The purpose of the project is to improve elementary school children's reading comprehension skills and knowledge (and, to a lesser extent, vocabulary knowledge) by integrating drama and dance strategies into instruction. The project provides professional development to teachers in a four-day summer institute, two follow-up professional development (PD) days in the first year, and up to five classroom visits per year by teaching artists who serve as ALA mentors.

The four primary ALA drama and dance strategies are Snapshot; Tableau; Expressive Movement; and Observe, Describe, & Wonder. With the Snapshot strategy, the teacher has students stand in a large circle in the room. The teacher gives the students a prompt such as a vocabulary word, a description of the author's message, and so forth. The students represent the prompt using a variety of body shapes and facial expressions. The students observe each other, describe their peers' facial expressions and body shapes (e.g., furrowed brows, lying down, bent arms, etc.), and reflect on how they might show the word or message using other depictions. Students not only express words or ideas bodily but reflect on others' movements and show what they know. They connect the word or message to personal experience, thus allowing the teacher to assess the students' level of understanding and give the teacher opportunities to provide formative feedback to the students. The Tableau and Expressive Movement strategies build on the principles of the Snapshot strategy by adding group and movement components, respectively. The Observe, Describe, & Wonder strategy is inherent in each of the other three strategies but is also considered its own strategy because it provides a framework that can be used independently to teach core subject material.

During School year 2009–2010, the evaluation is conducting case studies of seven teachers from four O'ahu schools who have been in the project for up to four years and who have been deemed to have superior expertise in implementing the arts strategies. The purposes of the interviews are to collect information about the educational and professional backgrounds of the seven volunteer teachers and about the teachers' understanding of the use of the arts strategies to help teach reading comprehension.

INTERVIEW PROCEDURES

1. Before the interview
   a. Contact the teacher via e-mail or phone
      1) The participating teacher will have been informed that you will be contacting them.
      2) Introduce yourself and state that you have been contracted to collect information about Curriculum Research & Development Group's evaluation of the Arts and Literacy for All research project.
      3) The interviews will collect information about the teachers' backgrounds and their experiences in using the arts strategies in their instruction.
         a) Inform the teacher that part of the interview will consist of a description of one of their lessons that utilized the ALA strategies and which worked especially well. Ask them to prepare for this by choosing a lesson and bringing their lesson plan in case they need to reference it during the interview.
      4) Confidentiality
         a) Tell interviewees that all information collected during the interviews will not include their names or their schools' names.
      5) Secure a date and location to conduct the interview and inform the interviewee that the interview should not take more than one hour at the most.
      6) Be sure that you have all the necessary interview materials.
         a) Copy of the interview guide
         b) Note pad and pens or pencils
            (1) Although the interview will be video recorded, it is advised to make additional notes during the interview. This may include additional follow up comments that you deem are important for eliciting in-depth information, providing a description of the interview environment, any distractions that may have affected the interviewees comments, and so forth.
         c) Video camera
         d) Audio recorder, for backup purposes
   b. Upon arrival to the agreed upon location
      1) Arrive 10 minutes before the interview
         a) If the interview is on a school campus, check in at office and ask about visitor sign in procedures.
         b) If the interview is at a non-school location ensure that you are familiar with the location and parking options.
2. Conducting the interview
   a. It is important to follow carefully the procedures specified here.
   b. Say the content in the indented material in the Times Roman font to the interviewee.
      1) Paraphrasing is permissible as long as the meaning of the statement is preserved
   c. If you find ways of improving the interview questions, record these in writing and meet with Paul Brandon and George Harrison to discuss the improvements before your next interview.
3. At the beginning of the interview
   a. Record the interviewee's name, the date, the time, and the location of the interview.
4. Beginning the interview and establishing rapport with the interviewees
   a. Introduce yourself.

As you know, you were asked to participate in the evaluation this year because Lei Ahsing and the arts strategies mentors thought you have a good understanding of the arts strategies and how to use them in your instruction. Today I'd like to ask you some questions about yourself and about how you use the ALA arts in the classroom.

The topics we will address include your personal background in the arts, your comfort in using the arts, and your impressions and experiences in using the ALA arts strategies.

Together with the observations that we have videotaped and the results of the student testing that will be done later this year, your comments today will give us a picture of how the strategies are being implemented in the school context. We want to point out that the purpose of this interview is *not* to evaluate you, but to gain understanding of the arts strategies.

We are videotaping so that we can write an accurate summary of what you say. No one will see the videotape except people on the research team. Lei and the mentors will not view it. And of course all your answers to my questions today, as well as the other information that we collect about you, will be reported anonymously.

I.   Background in the arts
I'd like to ask a few questions about your background in the arts.
[If yes to any of the questions, ask the teacher to describe the length of training, any participation in the arts, both professional and amateur.]
1. Do you have any formal training in drama or dance?
2. What about training in other arts such as the visual arts (drawing, painting, or photography)?
3. Do you have any training in sculpture or ceramics?
4. What about music?
5. In what ways, if any, do you think this background has affected how you teach the ALA strategies?
6. How much do you participate in arts activities outside of school?

II.   Comfort level using the strategies
1. On a 1-to-10 "comfort scale," where *1* = feeling very uncomfortable and *10* = feeling very comfortable using the ALA strategies to teach reading in the classroom, where would you place yourself on the scale when you were first trained in how to use the arts? And now?
[FOLLOW-UP: What made this more (or less) comfortable for you?]
2. Can you describe more about how you felt about using the strategies at the beginning?
[FOLLOW-UP: Did you think you were ready to use them? Did you think you had had enough training at that point? What kinds of questions did you have about the strategies at that point?]

III.   Recent use of the strategies
As I mentioned before the interview, we'd now like to discuss a time when you used an ALA strategy that you feel worked out really well. "I'd like to know how you *planned* the lesson,

how you *taught* the lesson, and how you *assessed student understanding* of the material you taught in the lesson. Let's start with how you planned the lesson. How did you go about it?

Planning the lesson ...
1. Describe the reading material that you choose for the lesson.
2. What were the learning objectives for this lesson?
3. Why do you think that this particular strategy is a good "fit" (pedagogical choice) to tease out the learning objectives?
4. When you were planning the lesson, how did you envision its implementation? (How did you see it working out?)
5. What was the time frame for the lesson?

Implementing the lesson ...
6. Describe what happened when you taught the lesson?
7. Describe any changes you made to the lesson as it unfolded in the classroom.

Assessing the lesson ...
8. To what degree did you make students aware of the learning objectives?
9. What evidence did you use to evaluate student learning?
    [FOLLOW-UP: Did you have students describe their understanding of the reading; for example, at various points while reading it the first time, at the end of the reading, in subsequent writing activities?]
10. Based on that evidence, to what extent did students master the concepts that were taught? In what ways were students able to articulate this understanding?

Reflecting on the lesson ...
11. How did this strategy encourage peers to share their understanding of the reading material?
    [FOLLOW-UP: How did students give feedback to each other about their understanding?]
12. Did any of the students struggle to learn the concepts? In what ways?
13. If you could do that lesson again, what would you do differently?

Thinking about the strategy...
14. How do you think this particular strategy helps students develop their comprehension of a reading passage?
15. How might the strategy help students think about the reading passage in novel ways?
16. How did you try to get the children to understand how the strategy helps their reading? For example, do you *explicitly* tell students how the strategy helps, or do you simply model the strategy?
17. Do you ask students to think about how they would use a strategy when they are quietly reading, without actually using the strategy? If so, explain how.
18. If you could do this particular lesson again, how would you change your use of this particular strategy?

General use of the strategies

19. If you think about how you plan and teach reading now, how is it different from before you participated in ALA?

20. If you compare your classroom management now with before you participated in ALA, how has it changed?

FOLLOW-UPS:

a. Can you compare student-student interaction now with then?

b. How about in the way you arrange the physical space in the classroom?

c. Do you use these classroom management tools in non-ALA activities?

21. We know from the logs that teachers typically do not use these strategies all the time and we are wondering—Why do you think that is?

FOLLOW-UPS:

a. What obstacles are preventing teachers from using them in their daily language arts lessons?

b. When project teachers teach language arts, what percentage of this do you think the ALA strategies are applied to?

c. What is your understanding of the value of ALA for meeting HCCPS objectives?

d. Do you think that if you had a clearer understanding of the ways that each strategy contributes toward students' working toward specific HSA goals that you would use them more often?

22. Can you describe aspects of the strategies that you think you need to learn better?

23. Have you attempted to use a strategy that didn't work well? If so, describe what happened during the planning, implementation, and assessment stages of the lesson.

24. Have you encountered any other obstacles or barriers to your implementation of the strategies?

[FOLLOW-UP: What are they? How have you dealt with them?]

Do you have any final comments or anything you would like to add to the interview?

Thank you very much for your time and your insights!

APPENDIX C

TEACHERS' WRITTEN COMMENTS ABOUT ALA AND CASE STUDY TEACHER INTERVIEW SUMMARIES

Table C-1. *Teachers' Written Comments on the Year-End Questionnaire*

Comments About Students and Their Learning With the Strategies

My students love drama. It's a great way to get their attention when they "mirror" my movements.

Students have been showing an increase in vocabulary, verbal and nonverbal communication and reading comprehension.

Using the ALA strategies has helped the students understand, feel, and explore the essential understanding at a deeper level than if the ALA strategies were not implemented.

Vocabulary building is an important part of reading comprehension in the first grade. Many of the students use the same words when defining a word, i.e. "kind means when a person is kind." However, when doing some form of pantomime and creative expression, the students were able to visualize the word better. They also were able to recall the word because of the visual memory. For those students that expressed the word through bodily motions it became even more powerful for them.

I really believe in developing the whole child. It's not just about test scores. It's important to get the child and parent involved in early education because that is the foundation to getting them to love books and love to read and learn. If parents are sold on this idea that they are the child's first teacher and that they have the opportunity to teach them through play, through drama through reading books, they are gifting their child with the tools that they need to make their kindergarten experience much more fulfilling and successful. The arts offers it all! I enjoyed what I learned, I see how it helps when you integrate arts into reading, social studies, science, etc., to help the child learn vocabulary words, concepts, biography, everything. It makes it much more meaningful and fun to learn. Got to balance the right and left brain in a child to make them much more well rounded and I believe it will help them with self confidence, too. I wish I had this when I was growing up. So thank you.

The ALA strategies have been very helpful to my students and I will continue to use them.

I teach preschool/Kindergarten special education and many students are nonverbal and beginning speakers. Using the ALA strategies helped them communicate and show their understanding.

It was difficult for most of the remedial students to connect and remember ALA strategies with the written text. They still need cuing like "remember the Snapshot you did yesterday. . ." or "think about the Tableau you did showing this character's trait. . . ."

I think the ALA project is a very worthwhile one. It definitely helps students connect with the content that they might not have otherwise. Students come away with a deeper understanding of the content.

Strategies helped the comprehension of the text, but not the actual reading of the text.

Great program and children loved it as they get to move and act out what they are hearing and later reading.

I see the value of ALA strategies in the classroom. My students enjoy the activities. ALA provides opportunity for students to develop a better understanding in not only reading, but in other subject areas as well.

The students benefitted greatly. They become more confident learners and performers and they learn to interact more positively with their peers. I believe that the arts make learning fun and it motivates the students to come to school and learn.

My students really enjoyed the ALA lessons. All of their comments and responses were positive. They always wanted more than I felt I could do with time (furloughs) and state testing to work around.

Students really enjoyed the activity.

The students really enjoy it and it helps enrich vocabulary.

Having done this for several years now, I have seen the students become more comfortable. As a result, they are much more focused when using the strategies.

The students benefitted from the strategies while they were in the classroom, but I don't know if they would apply it when reading independently.

Great learning experience.

Comments About the Teachers' Experiences With the Project

Using the strategies on a consistent basis has made me a lot more comfortable in integrating them within my curriculum.

I plan to continue incorporating the arts in my practice. I see the value of teaching the arts.

It was difficult for me at first to begin but with Lei's [the project manager] guidance it did get a little easier and more comfortable for me to use these strategies with my students.

Drama/Dance would not have been my choice for the area in the arts to integrate, but working in this area has opened up many new possibilities for me in my work. It is also an area that the children enjoy, so working with drama and dance has been rewarding and powerful.

I felt that I benefitted from the all day training. I attended one Saturday session and we also used one of our PD days. I did not attend the summer training session so I wasn't able to see the whole amount of the ALA program. I'm sure that I would have used more of the strategies effectively and seen greater gains in reading.

It's hard to tell right now as far as increasing their value to reading as I have the preschoolers from ages 3-5 years old only once a week for 10 weeks at a time. This is a parent and child program. What I did was introduce a lot of the strategies to the parents and tried to sell it to them, so that they can have a better understanding of what teachers do with this arts program and how we integrate other subjects to help the child learn different concepts or vocabulary words. They liked the idea as most of them don't know how to read to their child in an animated fashion. So this was exposure and I can only hope that they will continue to do this at home with their child as they read to their child on a daily basis.

At first, participating in doing the ALA strategies in front of colleagues is a little intimidating and a bit uncomfortable. However with practice, guidance and encouragement from the artist mentors, everyone is experiencing the same thing and the focus is on the experience not the performance. That, I carried over to the classroom. The students loved it. As for teachers who have not experienced these strategies, there is still hesitation.

I loved the workshops/training/Lei AhSing mentoring, etc. I just had a hard time using the strategies in the room once the class grew larger.

The ALA strategies are great for classroom management.

The students and I enjoyed using the drama strategies to make connections with reading and comprehending different components of a story or text.

I am glad I took the course. It has really enriched my teaching. I would love to take more classes should they be in town and not in Kapolei.

I would like to try strategies or activities that were in addition to the workshop.

The ALA strategies really helped to teach the difficult concepts such inferring, etc. If we can teach the children how to communicate and interpret other people then human relationships would improve.

Thank you for your time and wonderful program.

I wish there just was more room in my classroom to do more ALA activities.

I used ALA to build a positive learning environment and enrich students' vocabulary. Thank you for the guidance and strategies.

I am grateful for the experience. Thank you for your support throughout the years.

Thank you for allowing us the opportunity to participate in this workshop. It was interesting to hear the national perspective (Deb Broska); as well as to work with teachers from other schools

Jamie Simpson-Steele was always available for reflection, planning, brainstorming. She made the whole process much easier.

(Table C-1. *Teachers' Written Comments on the Year-End Questionnaire*, cont'd.)

The ALA Project through Lei Ahsing has been most helpful in exposing me to strategies that connect to different subject areas. I could not imagine teaching history, science or language arts using ALA strategies without her help and guidance. I am most grateful to have had this opportunity the last three years to learn from her and the other ALA experts. Thank you.

The strategies are helpful. I do have concerns about which data/how data was used to measure gains in reading due to implementation of ALA. I think there are many variables that contribute to student achievement in reading and ALA may be just one of them.

As a SPED teacher, it was very time-consuming to teach and implement the strategies because of the goals and objectives we need to target.

But I am unsure how to effectively assess the direct correlation of using the ALA strategies with improving students' reading achievement.

CASE STUDY TEACHER INTERVIEW SUMMARIES

TEACHER INTEGRATES ALA INTO HER ROUTINE, BUT DOUBTS TEST SCORES WILL RISE
(TEACHER A, GRADE 4)

Although Teacher A had initially resisted participating in the ALA project, the strategies are now an integral part of her routine. The ALA strategies, she explained, have made her reading lessons more engaging, have helped her to teach vocabulary, and have increased her confidence as a teacher. Nonetheless, she expressed her skepticism that the strategies contribute to generalizable reading skills that students can independently apply in their own reading or in standardized reading test settings.

Teacher A characterized herself as routine-oriented and organized. Her students have come to expect, for example, that they will use Snapshots on Tuesdays for studying vocabulary, and that for homework that night, they will write vocabulary sentences. "Tuesdays are vocabulary homework. No guessing." Teacher A's students know what their teacher expects them to do.

"We spend a lot of time organizing everything," Teacher A explained. "I do it because it makes the day go smoother. I have everything set up." Students know, for instance, that there are two exact positions for their desks—one for group work and one for individual work, and they know exactly what to do to rearrange their desks when Teacher A asks them to do so.

Sticking to a fixed routine entails some reluctance to change, however, and it is in this regard that the ALA project has enriched Teacher A's teaching repertoire. When asked to compare her current teaching approach to reading to that before ALA, she laughed, "Oh yeah, it's very different. We didn't do drama or *anything*. I mean, I would never have thought of acting it out or using your body to show you understand the word. Yeah. That's like night and day. I'd have just done textbook. The book says '[Ask] this question to the child: What does this mean?' Never will the book tell you 'Okay, have them pretend they're in a tropical island' or 'What would you be doing in a tropical island?'" Being required to participate in ALA has expanded Teacher A's approach to teaching reading comprehension.

In fact, Teacher A was initially averse to participating in the ALA project. In describing herself in retrospect, she laughed, "At first, I didn't like it because actually I'm a basically quiet shy person, so at first I kind of went 'grrr'—I think I probably showed my bad attitude in the beginning, and even my partner back then would say 'Stop it!' She told me 'Bad attitude, Teacher A!'"

Now Teacher A uses Snapshot and Tableau all the time. And, she plans her lessons so that students become engaged in the reading. When asked if her use of the strategies has changed the way she approaches a reading, she replied, "I guess I kind of focus more on how they could relate to it, versus just going 'textbook, textbook, next story, next story.'" Teacher A explained that because students are using the strategies, they are engaged with the story for a longer period of time.

One thing Teacher A does is direct students to use imagery while they are reading. "I say, 'Okay, now act it out. Do it in your head. Pretend like you're doing it. You know, just pretend you're there.'" She reported observing students silently moving their hands or arms by themselves but only, Teacher A said, after she had prompted them to do this imagining.

Teacher A expressed her doubts, however, about

ALA's effect on her students' general reading proficiency. When asked if she believed there was a connection between AYP (adequate yearly progress) and ALA strategies, she answered, "HSA [Hawaii State Assessment]—I don't know. Because, like I said, HSA is, you do it independently, so I don't think the children are sitting there reading the passage going 'Oh I think that's a good vocabulary word. Let me think about it.'" Teacher A's explanation suggests she sees ALA as teaching strategies; not learning strategies. "It helps in the classroom; I don't know if it will help in an HSA kind of setting."

Her routine in implementing ALA involves starting with a reading passage's content, then explicating a learning objective that would be applicable to the content, and finally deciding how she is going to implement the strategies. The learning objective is based on the state's content and performance standards (HCPS). Teacher A explained how she decided which learning objective to use with a particular folktale about sharks, "we couldn't really do author's message, so [we] took that out. Didn't really want to do personal connection because [the protagonist] got eaten by the shark, so that left me with problem-and-solution. So, each story I look [at] what would be the best match." She added, "I always tie it into a particular response, either interpretive, initial, critical, or... personal."

Teacher A said that when she uses ALA, she teaches a reading passage in two or three lessons. She described what she did with the shark folktale: "I do it the same way each week. I like a routine, so the kids know what to expect, and I did it the same way, which is we start with the vocabulary and then we do a Snapshot, and then the following day I would review the Snapshots very quickly and then we'd Tableau whatever we're focusing on—if it's a personal connection, or author's message, or conflict and resolution. So for that particular lesson, I chose to do conflict—the problem and the solution. So they did the problem, and then the main event, and then the outcome."

With the story's vocabulary, she said, "They

internalized the meaning of it so they can use their body to remember what the word means, so they use that to image their vocabulary. And hopefully it'll stay with them versus 'just write the definition, okay use it in a sentence.' So that's my reason for continuing. I do it all the time." Teacher A reported that her students use their in-class vocabulary Snapshots to write their homework vocabulary sentences. When asked if this helped them with their writing, Teacher A replied, "I asked the children, and they said yes, it makes a difference—It makes it easier for them to *do* the traditional homework, write the definition, use it in a sentence [and] underline the word, so even while I'm doing the Snapshot, I'm kind of prompting them 'Okay, now think about your sentence tonight,' you know, 'What can your sentence be,' you know, while they're holding their Snapshot."

In answering a question about how the strategies might affect HSA scores, Teacher A responded in a doubtful tone, but then explained that she believes ALA improves vocabulary retention: "I'd like to think it would help." After a pause, she continued, "It's increasing their vocabulary. Hopefully, it's making it more meaningful and they *will* retain it. Can't go wrong with increasing vocabulary." She said Snapshots serve to "make [vocabulary] more meaningful. If they do it, they'll remember it more than if they just wrote the definition."

But, when asked if students will choose to read more on their own during the summer, Teacher A expressed her doubts: "Because of ALA, no. So some of them read because they love to read, and they're going to read. And some of them won't read. And even if you force them to read it, they won't read it—they'll just sit there with the book and not read it. That's -just- them." ALA's effect on students' independent reading motivation is limited, according to her.

Teacher A's observation is that ALA helps learners' comprehension of the particular stories they discuss in class, but that it has little effect on their test scores. "Maybe they understand [a story] better cause we spent more time on it... That's

with us discussing it, reading it together, acting it out, now do your comprehension questions, and *of course* that's going to be better. But their HSA scores will probably come out, you know, still if they're well below, they're well below. But they're engaged, during class time. But assessment is assessment."

Not only has ALA helped Teacher A better engage students during reading lessons, it seems to have given her more confidence in her teaching. "This program really helped *me* build my confidence." When asked for elaboration, she replied, "Just being confident with other people watching me, and video-taping me, each year gets easier." Being required to participate in ALA has helped Teacher A to develop as a teacher.

Asked if she'll continue to use the strategies, she quickly responded, "Definitely. The Snapshot and the Tableau." "And I'll try and do dance maybe," she said with a playful guilty expression. "Probably about the same just because I have the lesson already and the music, I probably will do it again." It looks like ALA is here to stay for Teacher A.

TEACHER REPORTS INCREASED ENGAGEMENT WITH ALA, BUT COMPETITION FROM HER SCHOOL'S TEST-DRIVEN CURRICULUM
(TEACHER B, GRADE 3)

Teacher B, who has been using the ALA strategies for the past four years, revealed in an interview on May 10th that she doubts the strategies will improve her third-graders' reading test scores, and she shared her belief that the ALA activities serve as a set of teaching strategies rather than generalizable learning strategies. Teacher B reported that her students became more engaged with reading materials during ALA activities and that ALA facilitated deeper understanding than would conventional discussions, but that this deeper engagement and understanding was attenuated by her school curriculum's focus on test preparation and time constraints.

Students at her school practice taking tests on a weekly basis, Teacher B said. She believes that this probably has a stronger impact on test scores than ALA does. When asked about ALA's effect on test scores, she quickly offered her view: "That's hard to tell, though. I think the kids have just gotten good at taking tests, multiple choice tests, because they do it all the time." She explained throughout the interview that teachers at her school are preparing students for the state assessment by administering tests based on short passages students had read throughout the week.

Teacher B distinguished ALA strategies from test-taking strategies, saying that she doubts students use ALA during a test. "I think in math, they'll do that," imitating a student's voice, "'I can draw a picture, I can make a graph or something,' but I don't know if they're thinking, 'Okay to understanding the story, Oh, I could do a Snapshot or a Tableau in my head.' I don't know if they see that."

Teacher B explained that students need to be prompted to use the ALA strategies: "I don't know if the kids would actually use the strategy as a learning strategy for themselves, by themselves, to understand the story. I don't think it hurts in helping them better understand the story, but they have to be prompted. I don't know if they would use it on their own." This suggests that the ALA strategies function more as a teaching tool than a process that learners internalize and tap into.

When asked whether the strategies sustained students' interest in a particular story, Teacher B answered, "I think it makes them more *aware* of the story. I think it does pique their interest. They enjoy doing it, actually, the strategies, you know." She contrasts a lesson with ALA to one without it: "Otherwise, I think we kind of just read it and talk about it and 'Oh, okay, okay, okay' [Teacher B imitates a student flipping pages in a book and speaks in a boring tone]. But I think by actually doing the strategies, they do become more engaged in the story and they take a more active part in understanding the story." This suggests ALA is a powerful tool for teachers to increase student

engagement in a reading activity.

But, this deeper engagement with the stories does not keep its momentum, Teacher B explained, because their school curriculum is organized around test preparation rather than story exploration. When asked if ALA increased students' engagement with the reading, she replied, "I think [ALA] does allow them to delve more into the story rather than just reading it at face value and saying 'Okay, these are the characters, this is the beginning, this is the middle, this is the end.' I'm hoping with the ALA, they at least sort of put themselves into the story and try to get a deeper understanding from it. But it's very kind of difficult to continue that exploration of a story because it's just week, week, week [Teacher B chops her hands in a get-it-done manner], you know. And then, like I said, for a lot of them, the goal is [imitating a student] 'Okay, we're going to finish the story [Teacher B imitates a student tediously flipping pages in a book], I need to understand what's going on so I can do well on my test at the end of the week.'" Teacher B said she preferred working with longer reading materials because students become engaged in the content. She indicated that the ALA strategies contribute to this developing interest in a story.

Teacher B does not believe students acquire generalizable strategies from ALA that they can use on their own. Responding to a question about whether the strategies improve the state assessment reading scores, Teacher B said "I think that kind of goes back to 'I don't know if the kids internalize it, where they're using it as a learning strategy.' I use it as a teaching strategy, but I think there's a difference between using it as a teaching strategy versus a learning strategy, which I feel would mean the kids are able to use it independently to help them understand something. I'm using it to help them understand something, but I think I'm using it more to teach something. I don't know if the kids internalize when they're using it, because there are so many other strategies we teach them, right, when they're taking a test."

Teacher B uses the strategies to engage students on a personal level when teaching theme or other abstract information. She accomplishes this by having students go back and forth from discussion to Tableau. Without her guided discussion, students typically initially represent literal information from a reading, she said. "But when we discussed it and we talked about the idea of the story…, they were able to show more the idea of teamwork [the abstract concept she exemplifies]. So they would show, like, people playing games together. So, not just a character from the story. But, it took a lot of discussion and pointing out to them." Teacher B's use of the ALA elicits students to elaborate on text-to-self connections that she initiated in guided discussion.

Nonetheless, even though combining ALA with discussion has enhanced understanding, there are time constraints. When asked what barriers Teacher B was experiencing with ALA implementation, she immediately said time was the biggest issue, and explained that in her daily practice she does not carry out all of the steps recommended by the project unless she is being observed. In her words, "It's definitely more drawn out when I'm being observed…because when I know they're coming in to observe my lessons [I am] using the strategies a lot longer. But I do use it, but in a more quick-and-dirty type way… When I'm doing an actual lesson, I'm trying to go through the whole process, whereas if I'm using it in the class on an everyday basis, I might not go so much into the observing and describing and interpreting. I might just skip over a few things, and we might just look at the interpret, because that's what I want them to get out of it." Teacher B said she uses Snapshot and Tableau with nearly all of her reading passages, but that she trims time by selecting what she believes to be the most relevant aspects of the suggested implementation process.

Time has prevented teacher collaboration as well. "We don't have a lot of time, especially this year with the furloughs and so many of our meetings have gotten cut. We've never really had time to share and articulate—'Well, what are you doing, what are you guys doing and how are you using it in, you know, K-to-two? How are we using it in

three-to-sixth? Are you even using it at all? What strategies are you using?'—We've never had an opportunity to have that type of conversation." It is unlikely Teacher B will learn new ways to use the strategies from her peers.

When asked if she sees herself using the strategies in the future, Teacher B responded, "I definitely plan to continue using—at least what I've been using so far. I'm hoping," she says in a doubtful tone, "to try and expand and use more dance and movement next year, but I definitely see benefit to using at least the Snapshots and Tableaux—at least at this age." Teacher B's tone here suggests that she will likely use Snapshot and Tableau, strategies which, she explained, she can readily implement without careful planning. Whether she continues to expand her ALA repertoire into new areas will likely depend upon future time constraints, chances for collaboration among peers, and the amount of energy their curriculum devotes to test preparation.

TEACHER OBSERVES INCREASED CONFIDENCE AMONG SHY STUDENTS, BUT FINDS NOT ALL READINGS ARE SUITABLE FOR ALA
(TEACHER C, GRADE 5)

Teacher C shared some of the benefits and challenges she has experienced in implementing ALA in her fifth grade class. For Teacher C, ALA has facilitated understanding of some literary elements, and has increased participation among her shy and insecure students. Unfortunately, applying ALA to every type of reading passage in the course reader is not realistic, she explained, and the makeup of your class can determine the level of success with ALA lessons.

Among the literary elements that Teacher C reported success with when implanting ALA were sequencing, cause-and-effect, and character traits. With character traits, Teacher C made the case that ALA prompts students to consider evidence when discussing character motivations. In her words,

"They'd have to think about what the character said and did and come up with why: What was their motivation; what did they want to accomplish. I think [ALA] really helped them get to that point."

Teacher C encourages her students to empathize with characters, and one of the strategies she uses to accomplish this is Snapshot. "For the Snapshot, I would tend to use it for the vocabulary and for the characters and how they felt in a particular part. I think it helped them think more about how the characters would have felt in the real situation." Teacher C directs students to imagine themselves as the characters in the story, she said, to feel what they are feeling.

In reviewing the novel *Holes*, she used Tableaux to elicit character understanding. While describing how she directed students, Teacher C said "At first they were kind of nonchalant, you know, and I said 'Wait a minute, you're in there with a dozen lizards, and at any moment they could bite you. Remember, you could be bitten by a rattlesnake or scorpion and survive, but not one of those.'"

This connection with the characters in the story has given confidence to shy students who were typically inhibited in front of their peers. "Last year, I'm thinking of some kids that were kind of quiet, and when we would do drama, they really *came out*. Especially when they were like a different character in the story, [it] maybe gave them the confidence not to worry about themselves. Or, they were really funny, you know, and I didn't see that side of them [before], so, I like that."

Recalling one student who humorously adopted his character's personality, Teacher C said, "I remember one boy in the scene, a well-liked boy, a kind of athletic boy, came up with his scene and you know he's supposed to be pledging his love to the character who's going to choose between he and this other guy. And you know, he said 'My heart is full of love' or something which was so out of character [for him] but something he came up [with], and the kids just loved it, and cracked up when he did that."

Even though Teacher C has observed positive effects from ALA implementation, she admits that she could have used Tableau and dance more this past year. When asked to rate herself on a one-to-ten scale (10 being high) in how comfortable she is implementing ALA, she said "Well, I've avoided some things, like I don't do much dance and creative movement. I'd say maybe still eight, I'm not satisfied with myself." With Tableau, she said "I could have probably done Tableau more often. But been more selective, like not trying to bleed one out of kind of very uneventful stories. Just say, 'Okay, this is not one that is going to give me what I'm looking for, so move on to the next one.'"

Finding appropriate reading passages for doing Tableaux is a challenge, Teacher C explained. "If the story didn't have enough action, [student groups] might all do the same or very similar things, so it depended on- on the story itself. Some lent themselves more to variety. There was one we did about a girl who writes a story under a pen name because her mother's an editor, and I let them pick the scene for that one and they all picked the part at the end, which for that story was the most exciting part." Assigning scenes to groups, she suggested, would have been a better approach.

The way Teacher C prefers to use Tableaux works well with readings which have variety. "I guess I like the sequencing and having them secretly do a scene that the other ones *weren't* doing and having them try to figure out what scene it was, who the characters were and how they were feeling about what was going on, and then putting them in order." Teacher C explained that if a story does not have a variety of scenes that students can enact, there is not enough for the audience to work with when given the task of putting scenes in sequential order; the audience also experiences no suspense in guessing which scene a group is enacting.

Describing a passage that did work well with Tableaux, Teacher C said, "And then there was another one we did—it was on sequencing and

cause-and-effect, there was a series of events that happened, and that was a lot easier for them to pick something that happened along the way." If the goal is to implement ALA, Teacher C suggested, it is best to skip stories that are not appropriate. "Maybe just skip that particular story and go on to something else."

In fact, this year she was wary about teaching Tableau until she had a story in which she thought it would be successful. For instance, it was not until after her students had finished reading the novel *Holes* that she decided to implement Tableau. In planning a Tableau lesson, she said "I was trying to *pick* something that they really liked and got into. And so then I thought 'Oh, I'll go back to Holes.'" When asked what she would have done differently with *Holes*, she explained, "I would do more Tableau along the way, smaller little things along the way. And of course not have that gap between the story [and the Tableaux]. I think doing more scenes along the way of the feelings of the bullying and being in the wrong place at the wrong time—that kind of situation." While reading the book, which contains variety, action, and sequence, Teacher C integrated Snapshot into discussions, but she had not included Tableau until months later when she reviewed the book. This suggests that story characteristics are not the only factor inhibiting her from implementing complex ALA strategies.

The makeup of her class can also determine successful ALA implementation. In discussing classroom management, she expressed her dissatisfaction with her current cohort. "So now I've done it two years and I've had two entirely different classes. Last year, I probably had a third special ed, a third gifted, and some in the middle that had various behavioral problems…and yet they were really good in drama. And this year I would say [students are] less creative in some ways but more middle-of-the-road kind of kids…. I'm glad I had the two different years because thinking of last year, they were a little more creative when we do things—plays—they might speak in different dialects. We did this one play where one of the characters was a pig. And, some

people made a pig. One group made a pig on paper, one group made the pig on a stick, and then [in] another group, one person *was* the pig, you know, with a tail and ears and a snout and everything."

Offering an explanation for the difference between her cohorts, she said that with "last year's group, the kids seemed to be a little more mature, and this group, a little sillier, as far as acting." She continued, "About half the kids that I have this year weren't involved in the ALA program the previous year, so new strategies [for them]." For Teacher C, silliness and unfamiliarity with the strategies are student characteristics that impede ALA implementation.

Still, Teacher C's final comments about the ALA project indicate she values including the strategies in her class: "The kids really need a variety, you know, through the different senses, you know. I think they learn by doing, by seeing."

For Teacher C, implementing the ALA strategies requires careful planning. When asked if she intended to continue using them, she said, "I would like to. I would like to. Like I said, I do like Snapshot and Tableau…Um, I'd like to, but maybe be more selective in what I do and make sure I allow enough time for some real revisions and good quality feedback from the kids or from myself." In sum, Teacher C's comments suggest that she will continue to use the strategies, but how much she implements them will depend on the makeup of her classes and the reading materials available.

TEACHER COMBINES DRAMA WITH WRITING TO INCREASE READING SCORES
(TEACHER D, GRADE 5)

Teacher D, with 27 years' experience, reported that using the ALA strategies has boosted test scores, increased positive cooperation among diverse students, and has elevated her teaching skills to a new level. This is despite the waning enthusiasm at her school for arts integration, Teacher D's poor sense of rhythm and lack of experience with the arts, and her small corridor-style classroom.

Based on her self-report, it appears that Teacher D's integration of the drama strategies goes deeper than simply having students perform a scene after reading a story. She integrates drama into the writing process, going back and forth between writing a constructed response and performing. With this, she said, she strengthens students' awareness of text-based evidence for supporting the main idea in their responses.

According to Teacher D, when she uses ALA, students become engaged in the performance and do not hesitate to work closely with classmates that they normally would have avoided. "Cool" students work with special ed students, and boys with girls—combinations you don't see occurring on the playground or other classroom activities.

Responding to her school's concern that students are doing poorly on standardized constructed-response test items, Teacher D models the questions students are likely to encounter after a reading passage. Her students' reading test score gains are impressive. She reported at the end of the school year that "Their SRI [Scholastic Reading Inventory] scores have gone up, sometimes, hundreds of points, and the average for fifth grade is only fifty. And yesterday, our curriculum coordinator put all our data up and fifth grade was great, much higher than fourth grade, so we are doing something right in fifth grade in reading comprehension."

But despite this doubled increase in reading scores when compared to that of typical fifth-graders, the principal at Teacher D's school is not completely sold on the drama strategies, according to Teacher D. She said that faculty meeting agendas consist of new projects aiming to raise math scores and give the school a math-science-technology signature in order to ensure its survival in a time of school closures. In Teacher D's words, "I think she [the principal] is under a lot of pressure, you

know when they talk about school closings, possibly a school closing in Hawaii Kai, you can't wait; something had to be done. We needed to improve those math scores, and we needed a signature."

At the same time, the principal does cooperate with and help teachers who choose to implement project on their own. Teacher D continues, "But she still has supported ALA. She got me that carpet, and I wasn't supposed to have carpeting, but they went out and measured and bought carpeting." This was important to Teacher D because students had been doing Tableaux on the hard linoleum floor. The principal was responsive to her request, implying support for Teacher D's use of the arts.

Still, Teacher D rates her principal's advocacy of the project as in the middle: On the one- (not at all) to-five (very much) scale on the 2010 questionnaire, she rated her principal a three (somewhat advocating). According to Teacher D, the principal is not actively opposed to ALA, but she is not actively encouraging it either. This may be partly because the school accepted the ALA project before the current principal took office.

Teacher D's experience, though, suggests that the effectiveness of these strategies goes beyond reading test scores. ALA provides a means of getting diverse students to cooperate with each other. She describes an ALA lesson she did the year before: "That was really when I think I was first sold on the program, that one lesson, because it worked out so well. I had the kids who'd kind of think they were the cool [ones] in that class still touching or holding on [to each other] to do this with one of the SPED kids that maybe before in other grade levels had been left out, so I thought 'Wow! This is nice.'" Teacher D adds later that she observes students who normally do not talk with each other, such as boys and girls, cooperatively interacting in ALA activities.

Teacher D's awareness of peer cooperation with SPED students comes from her training. She holds a master's degree in teaching orthopedically handicapped children in addition to her bachelor's in elementary education. Teacher D reports that this background makes her aware of the role of movement in learning. She notes, however, that before ALA she had never used movement in her regular elementary school teaching: "Including drama and the dance and movement—it's something I didn't do before." The ALA project has provided a means for a richer integration of her knowledge and practice.

She attributes students' enhanced memory of reading concepts to the kinesthetic experience that ALA provides: "I think *doing* the body movement and the motor movement, I think it helps them remember something, rather than just doing something they've done at their seats, as opposed to that." Teacher D was the only teacher among those interviewed who did not cite expressive movement as problematic in her ALA implementation. Other teachers said they were uncomfortable including dance in their lessons because of classroom management or simply because they did not like expressive movement.

The process that students go through in planning how to enact the movement is also central to Teacher D's lessons. She describes the constructed-response lesson: "I had the pre, where I had just given them the question and they were in the computer lab typing—'cause we're moving to HSA online—and so I had the pre- where they hadn't cited as well as I would have liked. So then we went through the whole drama, where each group wrote out their response and then they acted it out with the Tableau-move-Tableau while someone was reading it…. And then they went back and did their own [constructed response] in the computer lab. Then I had the post where I could see [that] by themselves they could actually do it after going through the drama experience." Students first wrote independently, then collaborated to write a response and plan how to enact it, and then they constructed their independent responses. In the acting part she had them do a Tableau, move, and then do a final Tableau, while a group member on the side read aloud the constructed response that the performing group had

written together.

It is this "back and forth from the drama to the writing" that characterizes Teacher D's integration of the drama into language arts. She attributed students' improved use of evidence in writing to the integrated use of the strategies: "And when I did the post, they really got it that they had to cite evidence from the text. They couldn't just make a character inference without having their evidence from the text." According to Teacher D, ALA set up the conditions for students to improve their understanding of the text and of the process of using evidence for support in writing.

Interestingly, while Teacher D has a strong background in SPED, she has no training in drama or dance and she does not consider herself an artistic person. She draws on her discomfort in performing in front of her peers in order to empathize with her students who may feel the same way: "I think the most difficult part is actually going to the workshop, and you know, being there with adults, and you're the student being taught, because I'm not that good with rhythms, myself, and things like that [laugh], so I can really feel for the kids, you know. I try to make it a successful experience, 'cause I don't want them to be terrified."

Teacher D is confident and comfortable using the ALA strategies. On a scale from one to ten in comfort, she rates herself at "close to nine or ten," and on the questionnaire, she rated her confidence at six, the highest on the five-point scale and higher than any of the other project teachers. While most teachers have been in the project all four years, Teacher D has been participating for only two. She did, however, say that she went through more training than most other teachers at her school because she was acting as a liaison to her school, which the project coordinator had asked her to do. In this capacity, she was conducting faculty meetings and leading her school in implementing the ALA strategies throughout the school year.

Teacher D says she wants the school to keep the drama going, and she hopes the school's changes will allow it to continue. "Our school is going science-math-tech, so I don't want the drama to be lost. You know, we've gone through changes here, a new principal, a new signature, so we have a lot going on." Among all of the curriculum changes at the school, Teacher D did not mention support for the arts. Teacher D says that she is planning to integrate ALA with her science teaching next year.

When Teacher D was asked if there was enough momentum with ALA for the school to continue using it, she said that some teachers would continue to use the strategies, but that they would have to make it their own: "I think some teachers will. And I think—I think it's important you make it your own, like how I moved it so I could use it for HSA testing, prompting, you know. And that's what I showed them—that you can adapt it and use it for *your* needs and what the school's asking you to do, so I think some teachers will. All won't, you know, they won't all, [shaking her head] continue to use it, but I'm confident some of them will." Teacher D's appropriation of these strategies for her own needs may explain her successful experience with ALA.

Teacher D says that the ALA project has made her a better teacher. Although she had been using reader's theater in her classes before ALA, she said that the ALA strategies prompt her to think clearly about how the drama activities match the objectives: "You know, we do reader's theater, maybe, and skits, but this [ALA] is a kind of *different* type of drama where you actually- you have an objective you're working on, and you actually know what you're trying to get out of them. It's different than 'Okay, we're going to do reader's theater.' You know, sometimes I wouldn't have clear objectives to why I was doing reader's theater other than we come to it in the book now. So, I think it [ALA] has made me a better teacher, and I think it has helped the reading comprehension in the past two years." For Teacher D, the ALA strategies are valuable in that they provide a forum for collaboration among diverse students, and they direct her to more carefully consider how the lesson objectives match the drama activity.

When asked what she can do to improve, Teacher D says she has difficulty teaching students to use facial expressions in their performances: "Sometimes I have a little trouble with the facial expressions, and I think that's where the artists come in, so if I do get help again for the science next year, I really want to work on that because not all the children always can do that. You know, it's really hard to have the correct, to *hold* the correct facial expression in the Tableau. And that's really how you show the character traits sometimes, too." She also mentions constraints such as time limitations and not having a choice in which reading material to use the ALA. Upon reflection, she attributed her worst lesson, which was the reading passage for the ALA post-test, to these constraints.

Still, assuming Teacher D's self reports are accurate, the increased student scores and deeper level of student collaboration are testaments to her success in managing these constraints. Even in her small corridor room, she successfully implements ALA on a weekly basis, moving desks and occasionally taking her class to the cafeteria to perform.

Teacher D is a strong advocate for the ALA project. Educating the whole child is important to her and she sees the ALA project as a way to teach to the HSA and yet still teach to the whole child: "I hope the schools keep focusing on the whole child. I mean, the private schools do; they have their arts and drama and they still do a great job in the other academic areas." "I just want to thank everybody. It definitely has increased my level as a teacher, my skills. You know, I'm very grateful. Gee! I mean Lei even took me to Maui to look at a model school. I've been treated so well. I have my little camera and the gifts and things. It's really been a great project…. So, I'm happy. Thank you so much." When asked if she planned to continue using the strategies, she said "Oh yes, I will. Like I said, I want to try to go into science."

TEACHER USES ALA TO DEEPEN THIRD-GRADERS' ESSENTIAL UNDERSTANDINGS
(TEACHER E, GRADE 3)

With arts instruction being pushed aside, in an effort to raise test scores, teachers are struggling to find ways to integrate the arts into their instruction, said Teacher E. Combining ALA with understanding-by-design (UBD) has allowed Teacher E to integrate the arts into her lessons and at the same time address the high-priority benchmarks; i.e., those that are on the state assessment. When her students participate in the drama strategies, Teacher E explained, they deeply understand and remember a reading's content and literary elements.

With more of the day's teaching hours allocated to subjects that are on the test, Teacher E said, other benchmarks, including the arts, are given low priority. "We have art, health, music, and Japanese, but we only get to do it once a month because we don't have time. It's kind of like you look at all these subject areas and one takes precedence over the other…. So, although we see the value of [teaching] the arts, we just- it's one of those things where you just got to weigh it and kind of look at the parent demands." Balancing the arts with subject area benchmarks is a hot topic at her school, Teacher E conveyed.

Teacher E integrates the arts into her reading lessons by applying the ALA strategies in a UBD lesson format. What is UBD? Teacher E explains: "It's…formatting your lessons so you start off with the essential understanding. And then you have all of your performance tasks, and you have all of your class work and assignments all aligned to that big idea. So what was really nice about taking that [UBD training] class is that it really goes along with the arts, because in the arts, …you want to get that essential understanding from the kids as well, while integrating the arts."

When asked how UBD and ALA apply to reading goals, Teacher E explained how she translates the reading benchmarks into the essential understand-

ings of her lessons. "Well, if I think about our reading benchmarks, like problem-and-solution, and author's message, I think the author's message is more like the essential understanding- can be the essential understanding. So, I think we can incorporate the arts because they become the character, they become the role in the story, then they start to connect more with the meaning of the story or with the concept that I'm trying to get across, with the message that I'm trying to get across."

Not only does Teacher E use ALA to prompt her students to connect with characters in the reading, she also teaches them to use evidence they observe to make interpretations and predictions: "And in the arts, they learn to observe, you know, very carefully. They learn to describe, they learn to predict, they learn to interpret what the characters are doing or what the situation is all about just by looking. So it teaches the kids to really look at the artwork carefully."

Teacher E likened ALA's drama activities to looking at a painting and interpreting the author's message. "Just like in visual arts, they look at a painting. It's the same connection. The painting, you think, 'Well what is the artist thinking … when he or she painted this picture?' Same thing with drama, I think that when you look at the acting, and you look at it carefully and [ask] 'What message are they trying to get across.'" Teacher E is using ALA to enhance students' essential understanding, the author's message in this case.

But, even though ALA is working well for Teacher E and her school had undertaken the ALA project in order to integrate the arts, teacher buy-in is still not 100 percent. "A lot of teachers are not comfortable with the arts strategies, like the drama and the dance techniques." Teacher E explained also that "there are teachers here who just, who feel like the arts is just an obligation. They feel like 'Because we're in the project, I have to do it,' you know, 'I don't see the value in doing this yet. I just, I just need to get it done.' Whereas, me, I see the value, so I want to continue with it."

Teacher E said she shares her successful ALA lessons with her coworkers in hopes that they will use ALA more often. Still, there are teachers who are concerned about time constraints: "A lot of the complaints are that it is time consuming."

There is also concern that ALA strategies interfere with classroom management: "My fellow teachers, you know, they're… not as comfortable as I am to teach the arts—they'll try it, and they see the benefit, but I think they have more management issues, and they feel like maybe sometimes the students will get off on a tangent, you know, or get off task because of the movement, because of the drama, because they're interacting in small groups, yeah. So, I've seen and I've heard that there's problems, and that's why they tend to stray from the arts."

Teacher E mentioned that the school recently brought in a new principal who has continued to support ALA, but who is also trying to please all the teachers. "So, there's different perspectives on it—there's different takes on this. And I feel for him because now my principal wants to create a new system where everyone is doing the arts, but I think he's trying to find a way where- he doesn't want to push it where it feels like an obligation for them, but [where] it feels comfortable for everyone." The principal supports arts integration, but accepts that some teachers do not embrace the ALA strategies to the same degree Teacher E does. ALA may not be for everyone, but Teacher E keeps spreading the word because she sees her how engaged her own students are.

In comparing ALA with simple read-and-discuss lessons, Teacher E said ALA deepens their understanding: "If you were to just give them a passage, read it, you know [asking] 'Where's the problem? Where's the solution?' versus 'Let's act it out. You're going to be this character, and you guys *show* me what that looks like.' Then they can take that story [and] bring it to life. And that's where I see the arts just benefiting in every way possible."

Teacher E's descriptions suggest that drama activities energized and motivated her students.

"When I see them become a character in the book, they're just so different from just being a student in your class. You know, they perform it, they want to become someone else, so you just see them change for the better. And you see them want to memorize lines, and you see them want to refine their acting skills because they want to perform, you know. So, I just see them light up."

Students deepen their understanding through gaining new perspectives and empathizing with characters, Teacher E suggested. For example, when students planned and performed an ALA dance to represent volcanic eruptions of Vesuvius, it "gave them a new perspective on volcanoes." Later, students imagined themselves as the people of Pompeii, enacting people's lives in the first Tableau, their reactions to the eruption in the second Tableau, and their death in the third Tableau. "The students were crying," she said.

Essential understandings from this experience were deeper than she had expected: "When I had asked them 'Well, what did we learn from the story, what did we learn from this disaster?' They came up with some essential understandings that I never knew a third grader could come up with—like 'Family's important,' you know and 'You never know what happens.'"

ALA helped students remember what they read, too, Teacher E added. Students from her previous year still remember the story about Pompeii: "So, they're in fourth grade now, they'd come back, and to this day, they will tell me, 'I remember that story, Pompeii.' You know, because they were *in* that story, they connected with it; it went to another level where they could take it and apply it to their own lives. And it was just a very memorable experience."

Teacher E imparted her satisfaction with ALA: "It doesn't matter where I go because I think wherever I go, I can take with me what I've learned and hopefully share with other teachers what I've learned." She said she hopes more schools adopt ways of integrating the arts the way ALA does.

ALA FACILITATES ASSESSMENT AND PEER MODELING, BUT TEACHER STILL DEVELOPING HER SKILLS
(TEACHER F, GRADE 5)

After four years of experience and support in the ALA project, Teacher F still considers herself a "work in progress" when it comes integrating the ALA strategies into her lessons, she said. Teacher F explained that ALA activities provide a means for her to assess students' comprehension and serve to facilitate learning among struggling students, but she recognized that she could have implemented the strategies more often.

From the beginning of the project, Teacher F remembered, she felt anxious about including drama in her classroom. "I was thinking…what am I getting myself into. And there was no return because we made a commitment as a school to be part of this project." She spoke with a tone of resignation, "It was like, 'Okay [sigh]. Alright.' We just had to move forward, you know."

Teacher F described her struggle with ALA: "It's *not* in my nature, you know, it's still not me. I'm not a performer…. I'm the first to say that I still struggle with it. Like, this year, Lei came in twice to observe and to video tape," Teacher F laughs, "and both sessions she had, you know, very good constructive criticism for me. And, I take it because I'm still a work in progress, a *very* raw work in progress." Teacher F believes she has a long way to go before she can implement ALA as an expert.

Teacher F successfully uses ALA in assessing students' comprehension, however. Strategies like Snapshot and Tableau, she said, allow her to assess her class' level of understanding. Regarding Snapshot, she said, "Just by looking at some of the Snapshots you get a quick feel of whether they are on target or not—it was just kind of a quick Snapshot of where your class was at."

ALA activities also provide a means for struggling students to learn from their peers, Teacher F observed. "For the students who maybe struggled

a little more, at least having their classmates as models to see, 'Oh, this is how they felt at the beginning, and this is how he felt at the end.' It helped *them* with their comprehension, as well."

She also mentioned that students need this type of activity as an alternative to seat work. "So, every so often to have that break, even to just do a quick Mirroring activity, just to stand up, and get the blood flowing, it's good. And just being able for them to do a quick Snapshot, you know, I think that's good. It just breaks up the monotony of the school day." Quick strategies such as Snapshot and Mirroring enrich her daily activities.

However, Teacher F admitted to not using ALA as much as she thinks she should. After discussing ALA's merits, she said, "Could I be doing more of it? Of course, you know." She avoids dance the most, she explained, because it makes her uncomfortable.

Teacher F explained that at the start of the project, she was uncomfortable and surprised to discover ALA included drama. "To be quite honest, my impression was that it was going to be, like, drawing and painting and that kind of stuff—not movement and not drama. And so, to find out we were doing drama and movement, that was like a shock."

With experience, she has become more at ease, but remains tentative in claiming success with the strategies. "It's still not in my comfort zone, but I think just doing the strategies over the last few years, [I] feel a little more comfortable—How effective I am, I'm not sure. In the beginning, it's kind of like you were forced to do it because you were part of the project, but you know the more you do it, the more comfortable you are." Being required to use the strategies led to experience using the strategies which, in turn, led to increased comfort, but not necessarily increased skill.

Teacher F's awareness of the compulsory nature of the project was salient. She said that being observed by project implementers pushed her to implement the strategies. "Lei or the other teach-

ing artist would come into the classroom and, you know, observe, or you would have to do lessons and stuff, so that kind of forced you to do it."

Teacher F expressed her gratitude for the support she has received from the project implementers. She still struggles, though: "I guess she [Lei] kind of felt like I was drowning, so she kind of stepped in, which I appreciate, because I needed the help. I *still* need the help, you know, I still need the help."

She values ALA's effect on facilitating peer modeling. "The one thing about doing Snapshots, the one thing about doing quick Tableaux [is] if they are off-base, they can kind of look to see what other groups are doing." Teacher F indicated that the observe-describe-interpret procedure is what facilitates peer learning, but that she needed to improve her practice in this regard.

When asked how often she uses the strategies, Teacher F replied, "I would say, there's some strategies that are very easy to do, like Echoing, like Mirroring, you know, where it's not even really tied to a lesson as it's just to maybe help with management. So, I can see myself doing that every day, you know the Echoing, the Mirroring, just to get them to focus. In terms of the strategies that are tied into a specific lesson, I would say maybe once a week, maybe once every other week, I try to do something, even if it's as easy as if I'm reading along to them, show me how this character feels, a quick Snapshot, you know, as simple as that." Complex strategies such as Tableau are not in her routine, she recognized, but she does fit in "a quick Snapshot" when she sees that it will facilitate comprehension.

In response to a request for open comments, Teacher F described her experience in summary: "It's still not a comfort zone for me. I'm a work-in-progress, like I said earlier. I do appreciate the time and effort that Lei and all the other mentors have put into the project. And, you know, the kids really respond to it; they really like [it]. Even the more reluctant ones—they look forward to it, they never groan 'Oh my gosh we have to do a Tableau

today'—They never do that; it's something they look forward to. And when we haven't done it maybe for a while, they'll ask, you know 'Oh, are we going to do Snapshots today? Are we going to do Tableau today?' Or, you know, they'll ask. So, I know that they respond really well to it." Even though Teacher F is somewhat uneasy implementing drama strategies in her class, she sees that it does benefit students affectively and facilitates assessment and peer modeling.

HULA TEACHER AVOIDS ALA DANCE, BUT DISCOVERS TABLEAU'S POSITIVE EFFECT ON GROUP PARTICIPATION
(TEACHER G, GRADE 5)

Teacher G expressed her reluctance to include ALA dance strategies in her fifth-grade teaching repertoire, which is intriguing considering she also teaches hula. Teacher G had also been avoiding Tableaux this past year because she was concerned that her current students would not behave in group-work activities. Upon implementing them, however, she realized her skepticism was unfounded. Tableaux actually facilitated participation in her behavior-challenged class and improved understanding among students who typically struggled in reading comprehension.

Every year, Teacher G teaches hula to students who sign up with her to perform in the school's annual May Day celebration. When asked if this meant she was artistic, Teacher G laughed, "Only with hula. Trust me, when we did the dancing [during ALA workshops] I was not comfortable doing that kind of expressive dance. I was very uncomfortable." She explained her preference for a predetermined set of movements rather than creative expression: "I was like, 'tell me what you want me to do, show me what you want to do, I'll follow you.' But for me to come up and move the way the music moves you, I- [Shaking her head] I don't like doing that kind of stuff." Teacher G's experience with hula did not translate into being comfortable with expressive movement.

While she attributed part of her discomfort to the expressive nature of ALA dance, her perception of the trainers' level of expertise with dance also appeared to be a factor. "You know, I watch Lei and them, and they're so natural and they move so fluently, and I'm like 'Mmm, no,'" she said while shaking her head with nervous reluctance. Teacher G perceived her models as being very talented and difficult to emulate.

When asked if her discomfort with dance was due to having to perform in front of peers, Teacher G explained, "I don't like to look silly. I don't want to look silly. So, I find that I have an easier time actually when I'm trying to get my kids to do it. I guess because I have to model it, I just do it. But, with the peers, I was a little bit uncomfortable with it." Whereas performing in front of peers is risky for Teacher G, she is more comfortable when there is an instructional purpose for doing dance.

Yet, Teacher G had anticipated difficulty implementing strategies involving group work with her current students. It was not until late in the school year when she taught a lesson specifically for the ALA project that she brought complex strategies into her reading lessons—in this case, Tableau. "I knew that I had this project and I kind of knew that I wanted to do Tableaux and Snapshots and I didn't really work with Tableaux this year—I did a lot of Snapshots, but not necessarily Tableaux. And I have a kind of difficult class this year, um, behavior-wise, so I think that's why I didn't really move into the Tableaux- They had a hard time working with each other." Managing students' behavior in group activities was a salient point in Teacher G's account.

It wasn't until toward the end of the year that she included Tableau in her reading lessons. When she did, however, she was surprised with its facilitative effect on group work. Describing a particular lesson, she said, "What I loved about it was not necessarily the strategy itself, but it was the conversations. And the way they were working together because, like I said, I had so [many] problems with this class this year working together. And then, it kind of hit me, I should have been doing these Tableaux a lot earlier; that might be what would have helped my class sooner."

According to Teacher G, Tableaux also facilitated unexpected discussions about author's message. "Usually in the past, especially with this story, I don't think I've ever gotten them to articulate the author's message the way this class did it this year. Honestly, I think a lot of it was because they got time to discuss it as a group versus just being individuals. And then, the other part is, like I said, I had those really good thinkers, whereas some years I don't have as strong thinkers as I did this year, so I was fortunate." This suggests the Tableau activities contributed more to learning than independent class work did.

Teacher G's "really good thinkers," she said, served as models during the Tableau activities, giving struggling students a better understanding of the reading and of literary elements, particularly author's message. "So, in the past, it was more individual, right. …We read it together, we talked about it. We'd discuss it, but you're kind of individualized and 'Okay if you don't really get the author's message, well then you've got to figure it out yourself,' whereas in this case, they worked as a group. So, I know my lower students that normally would struggle trying [to understand] author's message actually got to hear the other students. And then they kind of started getting the idea that author's message is a universal message."

In the lesson Teacher G was describing, discussions about author's message occurred after students performed the Tableaux in front of the class. "So after we did all of [the Tableaux], we did discuss each Tableau, and we did discuss the author's message. And then we talked about, 'Okay, if you're saying this, where in the story [is your supporting evidence]?' and 'That's what your Tableau should have shown.'" Rather than simply having students interpret the author's message after reading the story, Teacher G elicited discussion about author's message based on audience interpretations of the Tableaux and the story details that groups chose to represent as evidence for their interpretation of the message.

What made this work, Teacher G indicated, was

participation. When asked why Tableaux were effective, Teacher G answered, "I think it's just the fact that everybody needs to participate." As an example, she talked about one of her students, whom she had been having problems with: "Even though he was just the river [Teacher G laughs], you know, the Delaware River, he at least was participating. He got involved. And that was for me such a big deal because I was having so [many] problems with him at that point, getting him to participate, getting him interested in doing things. So, like I said, in hindsight, I kind of wish I'd done it earlier."

Students participated in Tableau even when they had difficulty understanding the story. "The ones I would say that didn't really get it, they chose to portray safe things: scenery things, like trees and a rock…. But the students that I know were getting it, they actually chose the characters to portray."

Teacher G explained that she did not push struggling readers to take on overly challenging roles because she is concerned they will not participate. "Because I want to make sure they're going to participate, and if that's what they feel safe in doing, then I'm not going to say [do it differently]. I *encourage* them, you know, when they're practicing, rehearsing in groups, I try to encourage them to 'Well, you know, last time you were the background, maybe this time you can do something that's a little more important to the scene.' But if they go back to what they were doing, I'm not going to [stop them] because I know that's what they feel safe with, that's what they're comfortable with—they're *participating*. You know, I let it go; I don't discourage it."

When asked if students' choice to portray safe things was less important than the discussion in the group, Teacher G agreed, and added "To me the conversation in the group and why they're doing it [is more important] because I heard one group in particular—I had two really strong students in there, and they both had their own ideas. So, just that give-and-take. They had to defend their position, which I was like 'Wow!'

And then, of course, the rest of the group [was] just standing there listening." Some group members were less active, but it appeared that everyone was paying attention.

One highlight of Teacher G's lesson was that a typically quiet student became more active in class activities after experiencing the ALA lesson: "That one student, he's normally very quiet in class, doesn't say much. It's funny because after that, lately this past month, he's been participating more, talking more. Come to think of it, he's been talking a lot more in class." Teacher G indicated that she valued the effect ALA has on increasing student participation.

Finally, it would not be fair to say that Teacher G always avoided dance in her lessons. She noted an instance in which she used movement as an extension of Snapshot while reading their story: "Throughout the book, we would do some ALA strategies, but more for vocabulary. Yeah, we did more Snapshots and vocabulary, and I did a little bit of movement, you know when they were trudging up to Trenton, you know, the cold, and so I had them move around the room. So at least they can experience and see that you're walking through these drifts of snow, and how would you feel, your feet are bleeding, you know, you're cold, you're hungry, you don't have clothing. So, just to kind of give them an idea." This suggests that Teacher G sees the application of movement to be sensible when teaching vocabulary that denotes a manner of movement. Whether she will be comfortable with a full-blown dance, however, remains to be seen.