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ActivBoard Use in the Atkinson Classroom

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Executive Summary

In reviewing the Coweta County School System for accreditation, the AdvanceED team observed technology use primarily for teacher presentation (Coweta County School System, 2010). The school system began searching for ways to put technology into the hands of the students. This evaluation report examines ActivBoard use in Atkinson Elementary. All Atkinson Elementary homeroom classrooms, media center, gifted classroom, music room, and EIP classrooms have ActivBoards installed. Allowing students to use ActivBoards would appear to be an excellent method of putting technology in the hands of students. The purpose of this evaluation is to report findings concerning ActivBoard use, type of ActivBoard use, teacher perceptions as to the positive aspects of ActivBoard use, teacher perceptions as to the challenging aspects of ActivBoard use, and the support needed for active student involvement with the ActivBoard. The following questions will direct the evaluation of ActivBoard use in the classroom:

- 1. Is the ActivBoard used in the classroom?
- 2. How do students and teachers use the ActivBoard for instruction and learning?
- 3. What are the positive aspects and challenging aspects of teacher and student interaction with the ActivBoard?
- 4. What support will encourage teachers to design classroom instruction for active student participation with the ActivBoard?

Evaluation methods included archival data from administrator observations, evaluator observations, teacher surveys, and a focus group interview. One key finding of the evaluation is that ActivBoards are in use approximately half of instruction time with largely whole group instruction. A second finding is that teachers are primarily using the ActivBoards as a projection tool. A third finding is that teachers would like to have continuous training specific to their grade or subject and more technical support.

Recommendations for involving students with ActivBoards include continuous training for teachers specific to their grade level, allocating time for ActivBoard planning, and additional technology support. The evaluation recommends quality technical support as a key component to encouraging ActivBoard use. In conclusion, students usually experience the ActivBoard in a whole group setting as a projection device. Teachers feel they need more training, planning time, and technology support to involve students in ActivBoard use.

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Introduction

Why is the evaluation of technology important to students, educators, the community, and our society? Our schools strive to create technology literate graduates in accordance with state and federal guidelines (Georgia Department of Education, 2010).

The portion of the No Child Left Behind (NCLB) Act known as 'Enhancing Education Through Technology Act of 2001' (E2T2) has a goal: To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability. (Georgia Department of Education, 2010)

Our education system is not only focused on requirements, but also fostering technology literacy to meet the needs of everyday life and the work place. One author states, "Education is a system when all of the parts work independently and together to achieve a worthy result: success for learners in school and in life" (Kauffman, Guerra, & Platt, 2010, p. 49). If our goal as an education system is to prepare our students for life outside the classroom, technology provides many advantages to all stakeholders. With technology, our students have the power to communicate, create, and investigate at their fingertips. As educators, we seek to integrate technology into our learning environment in order to provide our students with the skills and resources needed to become successful in school and functioning members of our society. One evaluation found technology use "has the most consistent relationship with student achievement across all grades..." (Martin et al. 2010, p. 66). Many times our schools do not complete the next step of implementation, which is evaluation. Educators often trust that technology is working without evaluating the results of the implementation. In any implementation process, it is important to measure results and adjust the implementation based on the results. When conducting education evaluation "it is vital that evaluation is used only for fixing and improving and never for blaming" (Kauffman et al., 2010, p. 27). The interactive whiteboard (IWB) is one technology tool available to many teachers and students. An IWB "is a touch-sensitive screen that works in conjunction with a computer and a projector" (Shenton & Pagett, 2007, p. 129). Unfortunately, the IWB technology by itself will not create technologically literate

community members. Educators must focus on creating an interactive technology environment for our students in preparation of a technology-focused work place. One evaluation found "surely pupil participation in its broadest sense should include room for autonomous or semi-autonomous activity where they can learn from their own mistakes, choices and decisions but with the help and support of a knowledgeable guide and facilitator, the teacher" (Hall & Higgins, 2005, p. 113). Students need to see technology use as more than a presentation tool in order to produce the technology mastery needed for our technology-saturated society. An additional evaluation found that students need more opportunities to interact with the IWB rather than using it only as a teacher tool (Shenton & Pagett, 2007). Technology should be interactive, an enhancement to the current curriculum, and autonomous in order to facilitate technology mastery. Many teachers resist technology because they view technology as an intended replacement of current teaching practices or the current curriculum. One study suggests that when introducing the IWB to teachers, introduce the IWB as an enhancement to the curriculum and not a replacement (Lopez, 2010, p. 911). Another study found teachers needed a deeper understanding of technology's potential and more concrete experiences (Barron, Dawson, & Yendol-Hoppey, 2009, pp. 98-99). Often teachers need more support before technology implementation is successful. Evaluation can pinpoint the areas of need in striving for a successful implementation.

In reviewing the Coweta County School System for accreditation, the AdvanceED team made recommendations for improvement. The team observed technology use primarily for teacher presentation (Coweta County School System, 2010). The community and school system invested thousands of dollars installing throughout the school system an IWB called the ActivBoard. The AdvancED team found students do not utilize present technology to its full potential creating poor student mastery of technology. This evaluation examines ActivBoard use in Atkinson Elementary, a kindergarten through fifth grade Title I elementary school. Title I schools have at least 40 percent of their students designated as low income (United States Department of Education, 2010). The findings of the evaluation provide insight into potential avenues in creating an interactive technology environment for students. The client of the evaluation is the Atkinson Elementary School principal who is striving to improve student technology mastery within the school. The evaluator of the study is a graduate student at the University of West Georgia, an employee of the Coweta County Schools System, and a teacher in the school under

evaluation. Teachers, students, administrators, and community leaders are stakeholders in the evaluation. Teachers and students have access to the ActivBoards while community members and administrators have designated funds to purchase ActivBoards. In addition, administrators have allocated time and resources for in-service training for ActivBoard integration.

Purpose:

Evaluating the use of technology is a high priority considering the amount of money spent on the resources needed to implement technology. The purpose of this evaluation is to determine ActivBoard use, type of ActivBoard use, teacher perceptions as to the positive aspects of ActivBoard use, teacher perceptions as to the challenging aspects of ActivBoard use, and the support needed for active student involvement with the ActivBoard. This evaluation is a formative and summative evaluation. The evaluation is summative due to teacher completion of in-service training. Continued in-service training is available and integration of ActivBoards is ongoing making the evaluation formative as well. The evaluation provides information to administrators as to the amount and type of instruction taking place with ActivBoards. In addition, the evaluation provides information as to the perceptions of teachers in allowing student ActivBoard participation. Often teachers think of interactivity with the IWB differently than students. In most classrooms, the teacher controls the IWB, which was the case in one evaluation, "The teachers' understanding of interactivity, which they saw as a property of the board, and not related to pupil-pupil interactivity or teacher-pupil interactivity" (Shenton & Pagett, 2007, p. 135). The information from the evaluation gives administrators insight into the other areas of support needed by teachers in order to integrate the ActivBoard effectively involving students. Administrators can make decisions about teacher training and technical support using the information collected in this evaluation. Teacher training for involving students is imperative in technology integration. One study found students wanted daily interaction with the IWB instead of only teacher directed activity (Hall & Higgins, 2005). Technology support is critical in technology integration. Many teachers do not use technology due to technology problems. If technology does not work properly, the teacher or student cannot use it. A study found that the technology services department needed to work more closely with teachers to improve tools (Martinez, Lui, Watson, & Bichelmeyer, 2006, p. 279). If administrators, technology support, and teachers

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work together, addressing technical problems in a timely manner students and teachers will have more confidence in technology (Hall & Higgins, 2005).

Evaluation questions:

The objective of this evaluation is to determine present ActivBoard use for instruction, the perceptions of teachers toward the use of the ActivBoard, and the support needed for active student use of the ActivBoard. The following questions will direct the evaluation of ActivBoard use in the classroom:

- 1. Is the ActivBoard used in the classroom?
- 2. How do students and teachers use the ActivBoard for instruction and learning?
- 3. What are the positive aspects and challenging aspects of teacher and student interaction with the ActivBoard?
- 4. What support will encourage teachers to design classroom instruction for active student participation with the ActivBoard?

Methods

Participants

The participants in the evaluation are teachers in Atkinson Elementary, a kindergarten through fifth grade

Title I elementary school. The participants in the evaluation have an ActivBoard installed in their

classroom. ActivBoards have been present in the classrooms for over one year.

Design

- Methods to evaluate question 1: Archival data of an administrator observation checklist provides
 quantitative data concerning ActivBoard use. In addition to archival data, the evaluator completed
 a quick observation checklist to provide quantitative data as to the use of the ActivBoard.
 Teachers with Activboards in their classroom completed an online teacher survey. The survey
 provides qualitative data as to teacher's perception of ActivBoard use in their classroom.
- Methods to evaluate question 2: Archival data of administrator observations of ActivBoard use provides quantitative data for the type of instructional methods used with the ActivBoard. In addition, an evaluator observation checklist provides quantitative data concerning ActivBoard use. A teacher survey provides qualitative data as to the instructional methods utilized with the

- ActivBoard. A focus group interview provides qualitative data as to the instructional methods utilized with the ActivBoard.
- Methods to evaluate question 3: The teacher survey and teacher focus group interview provides
 qualitative data about teacher perceptions of positive aspects and challenging aspects of
 ActivBoard use by teachers and students.
- Methods to evaluate question 4: The teacher survey and teacher focus group interview provides
 qualitative data about the types of support needed to encourage teachers to design classroom
 instruction for active student participation with the ActivBoard.

Instruments and Procedures

Several instruments collected data regarding ActivBoard use and teacher perceptions of ActivBoard use in Atkinson Elementary School. The instruments are as follows:

- Archival data obtained from an administrator observation checklist collected quantitative data.
 The administrator used the checklist during recent classroom observations of 20 teachers.
 Administrator observation information demonstrates ActivBoard use and instructional methods used with the ActivBoards.
- An evaluator observation checklist collected quantitative data about ActivBoard use. The
 evaluator observed classrooms several times during the school day totaling 81 quick checklists.
 The evaluator observation checklist provides additional information as to student or teacher use
 of the ActivBoard.
- The 26 certified teachers who have an ActivBoard installed in their classroom received an online survey concerning ActivBoard use. The teacher survey collected qualitative data from 24 teachers about ActivBoard training and teacher perceptions of the positive and challenging aspects of ActivBoard use by teachers and students. In addition, the survey collected data about the teacher perceptions of the amount of ActivBoard use, teaching methods, and support needed.
- A teacher focus group interview including 10 teachers provided qualitative data into the positive and challenging aspects of ActivBoard use by teachers and students. The focus group provided details into the areas of support needed for active student use of the ActivBoard.

Table 1. Evaluation Instruments in ActivBoard Evaluation

	Administrator observation	Evaluator observation	Teacher Survey	Focus Group
ActivBoard use	X	Х	X	
Instructional methods	X	X	X	
Teacher perceptions			X	X
Support needed			Х	Х

Summary of Key Findings

After analyzing the data, the evaluator found the following results in relation to ActivBoard use in the Atkinson Elementary classroom.

Evaluation Question One

Is the ActivBoard used in the classroom?

Key Findings for Question One

Finding commonality was difficult in analyzing the data from the evaluator and administrator observations in Table 2. The administrators observed 70% of teachers using the ActivBoard. While the evaluator found a little less than half or 43% of the teachers using the ActivBoard. Teachers may have tried to use technology more when an administrator was observing rather than the evaluator. In addition, the administrator may have observed for a longer duration than the evaluator. The longer duration of observation may have allowed more time for technology use. The data shows that classrooms are using the ActivBoard an average of 56% of the time observed, it appears teachers are trying to use the ActivBoard as an enhancement for instruction, but the percentage of use at Atkinson Elementary indicates teachers may need to continue working to integrate the ActivBoard more often.

Table 2: Observations results for ActivBoard Use

Data Collection Instrument	Yes the ActivBoard was in use	No the ActivBoard was not in use
Administrator Observation	70%	30%
Evaluator Observation	43%	57%
Average	56.5%	42%

Evaluation Question Two

How do students and teachers use the ActivBoard for instruction and learning?

Key Findings for Question Two

Commonalities were obvious in data analysis in Table 3 for the type of setting in which the ActivBoard is used. Only 8% of teachers reported using the ActivBoard most often in small group. The administrator observed 7% of teachers using the ActivBoard with a small group and the evaluator did not observe any small group instruction using the ActivBoard. The common results from three data collection methods exhibits a lack of small group use with the ActivBoard. In type of ActivBoard activity, Table 4 exhibits the data. The teacher survey reported using Flipcharts more frequently than other activities. The survey information was not congruent with the observational findings. ActivBoard use as a projection screen was the most common use of the ActivBoard as observed by the administrators and evaluator. The administrator and evaluator observations reported using flipcharts the second most frequently. This data exhibits that flipchart use is frequent, but not used as frequently as teachers may perceive. The observational data in Table 5 of the Atkinson Elementary evaluation indicates the frequency of use by teachers and students during observation. The administrator and evaluator data is congruent in that teachers are using the ActivBoard an average of 98.5 % of the time observed. Students are only using the ActivBoard an average of 30% of the time. A study found similar results with little student interaction where students actively engaged with technology less than once a month (Barron et al., 2009). Another study recommends the teacher and student become co-learners in using the IWB (Lopez, 2010). The students at Atkinson do not appear to be co-learners in using the IWB and do not appear to be using the ActivBoard frequently.

Table 3: Frequency of the Setting for ActivBoard Use

Whole Group	Small Group
100%	7%
100%	0%
92%	8%
97.3%	5%
	100% 100% 92%

Table 4: Frequency of Type of ActivBoard Activity

Data Collection Instrument	Projection screen	Flip chart	Interactive Game
Administrator Observation	60%	27%	27%
Evaluator Observation	40%	29%	6%
Teacher Survey	4%	58%	17%

Table 5: Frequency of ActivBoard use by teachers and Students

Data Collection Instrument	Teacher ActivBoard Use	Student ActivBoard Use
Administrator Observation	100%	36%
Evaluator Observation	97%	24%
Average	98.5%	30%

Evaluation Question Three

What are the positive aspects and challenging aspects of teacher and student interaction with the ActivBoard?

Key Findings for Question Three

The results from the interview and teacher survey were very common in response. The survey data in Table 6 shows the teachers perceive the most common challenges in using the ActivBoard to be technical problems, lack of training, and lack of planning time. An open-ended question on the teacher survey revealed 58% of teachers commented on training to improve student ActivBoard use. The interview data reiterates similar challenges as perceived by the teachers including technical problems and training. An additional study found that for IWB integration to be successful technical support is necessary (Hall & Higgins, 2005). The positive aspects of ActivBoard use expressed during interview in Table 7 include student engagement, connectivity to the world, and fast access to resources. The data reveals teachers enjoy using the ActivBoard, but the lack of training and lack of technical support are barriers to ActivBoard use by students.

Table 6: What Prevents Teachers from Using ActivBoard Most Often from the Teacher Survey?

Challenges to Prevent ActivBoard Use	Frequency of Responses	
Technical Problems	25%	
Lack of Training	25%	
Lack of planning time	33%	

Table 7: Positive Aspects of ActivBoard Use from Interview

Interview Theme	Interview Findings	
Positive Aspects	 ActivBoard engages students. ActivBoard brings the world to the classroom. ActivBoard allows scanning of documents to model handwriting on the exact same paper as student. ActivBoard allows teacher to access information quickly to share with the class. ActivBoard allow videos to been seen and accessed easily. 	

Evaluation Question Four

What support will encourage teachers to design classroom instruction for active student participation with the ActivBoard?

Key Findings for Question Four

The teacher survey data in Table 8 indicates teachers primarily desire continuous in-service training and time for planning for active student involvement in ActivBoard use. A study found teachers need professional development that should include teaching skills that complement the use of the IWB (Shenton & Pagett, 2007). The interview findings in Table 9 reiterate the theme of continuous training particularly of a specific grade or subject. An additional study, recommends professional development should be of a long duration, include ongoing support, and contain a close relationship to practice (Martin et al., 2010). The interview and survey of this evaluation indicate teachers at Atkinson Elementary would like to have ongoing training, support from their peers in planning time, and the subject matter of training sessions pertain to the teacher's classroom instruction.

Table 8: Teacher Survey Results for Most Frequent Support Needed

Most Frequent Support Needed	Frequency of support needed by teachers
Continuous In-service training	50%
Team planning time for lesson planning	29%

Table 9: Interview Responses of Support Needed for Student ActivBoard Use

Interview Theme	Interview Findings	
Needs for student use	 Time for teacher planning. Time for observation of teachers successfully using the ActivBoard with students and small groups. Time for training. Training tailored to a particular grade or subject. Time for teacher sharing. 	

Recommendations and Conclusions

The data about ActivBoard use in this evaluation indicates approximately that half of the time students are in the classroom ActivBoards are in use. While ActivBoards are in use, teachers are using the ActivBoard almost the entire time while students have very limited access. Limited amount of technology use for students is not uncommon. An additional study found students actively engaged with technology less than once a month (Barron et al., 2009). In addition, the results of this evaluation show that ActivBoard use is primarily a presentation tool rather than an interactive tool. These findings are congruent with the findings of the AdvancED findings (Coweta County School System, 2010). In addition, primary use of the ActivBoard is in a whole group setting and rarely a small group. Teachers desire specific training, technical support, and time for planning.

This evaluation recommends school leadership develop training sessions for teachers to facilitate student ActivBoard use. The sessions should include content directed toward a specific grade level or subject. The training sessions should group participants within a particular grade level or subject in order for teachers to share ideas and materials. One study found professional development should devote time and training including skills that complement the use of the IWB (Shenton & Pagett, 2007). During interview, one teacher suggested the training leader should be a classroom teacher proficient in ActivBoard use. The training should be continuous throughout the school year in order for teachers to implement strategies into their classroom instruction. An additional study, recommends professional

development should be of a long duration, include ongoing support, and contain a close relationship to practice (Martin et al., 2010). School leaders should allocate time for ActivBoard discussion. Brief discussion or sharing can occur during faculty meetings or professional development meetings. A study found administrators should work closely with the technology services department to improve the tools and provide support (Martinez et al., 2006). Another recommendations is technical support should correct ActivBoard issues quickly and efficiently to encourage continuous ActivBoard use. If teachers cannot trust the technology, they will discontinue use of the technology. An additional study found that for IWB integration to be successful, technology support should be enhanced (Hall & Higgins, 2005). ActivBoard software is unavailable to teachers outside the school setting. An additional recommendation is that the technology support department should investigate how teachers can use ActivBoard resources at home. Another study recommends the teacher and student become co-learners in using the IWB (Lopez, 2010). Lastly, this evaluation recommends a selected group of students from each classroom receive ActivBoard training either during or after school. When students are using the ActivBoard independently, the trained students can act as an "ActivBoard Specialist" in alleviating ActivBoard issues when the teacher is unable to assist.

One success of the evaluation of ActivBoard use is that the evaluation provides data as to how ActivBoards are used. In addition, the evaluation provides teacher insight into the training needed to encourage active student participation. Another success is that 24 of 26 teachers provided data for the survey offering input from almost all teachers with ActivBoards. Conducting observations was a challenge of the program. The evaluator completed a quick checklist for a spontaneous observation to determine if ActivBoards are in use. Future studies should include one scheduled observation a longer duration as well as the spontaneous observation. More observational data of present ActivBoard use assists in developing training material. The evaluation findings show teachers are trying to use ActivBoards, but they need more direction for including students in the use of the technology. One lasting effect evident in the evaluation is that technical support is a key component for ActivBoard integration and student use. If the ActivBoard or any other technology tool does not work properly then the tool will no longer be included in lesson planning. In conclusion, teachers feel they need ongoing training that is specific, more planning time, and more technology support to involve students in ActivBoard use.

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Appendix A

Administrator Observation Checklist

Date:	Grade Level:		
Check all of the items t	heck all of the items that apply during observation.		
ActivBoard use	d during observation.		
	racting with ActivBoard.		
Student is inter	acting with ActivBoard.		
Whole Group			
Small Group			
How is the Acti	vBoard being used for instruction? please check all that apply below.		
projection serve	en for document, form, or video		
Flip chart	electronic dry erase board/chalkboard		
Website			
Interactive gam	ne		
Real World App			
Research Skills			
Differentiate Ins	struction		
Other			
Observer:	Observer:		

Appendix B

Evaluator Observation Checklist

Date:	Grade Level:
Check a	Il of the items that apply during observation.
	ActivBoard is being used during observation.
	ActivBoard is not being used during observation.
	Teacher is interacting with ActivBoard.
	Student is interacting with ActivBoard.
	Whole Group
	Small Group
	Subject
	Language Arts
	Math
	Social Studies
	Science
	Other
	How is the ActivBoard being used for instruction? please check all that apply below.
	projection screen for document or form
	projection screen for video
	electronic dry erase board/chalkboard
	Flip chart
	Website
	Interactive game
	Real World Application
	Research Skills
	Differentiate Instruction
	Other
Observe	er:

Appendix C

Teacher survey about ActivBoard use in Atkinson Elementary

This survey is for Kim Ward, a graduate student at the University of West Georgia. The survey answers are confidential. Identifying information such as email addresses or IP addresses will not be collected. The survey should take about 5 minutes to complete. You can stop the survey at any time. The surveys will be used to determine how ActivBoards are being used in our school. Please select the answer that BEST describes you and your classroom.

If you have any questions, contact Kim Ward at kimberly.ward@cowetaschools.org.

Thank you for taking the time to complete the survey.

- 1. Do you agree to participate in this study?
 - a. Yes, I will participate in this study.
 - b. No, I will not participate in this study.
- 2. How many years have you been teaching?
 - a. 0-5
 - b. 6-10
 - c. 11-20
 - d. 21-30
- 3. What is your age range?
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50 or older
- 4. What is your gender?
 - a. Male
 - b. Female
- 5. What grade student do you teach?
 - a. K-2
 - b. 3-5
- 6. How many years have you been using an ActivBoard?
 - a. 0-1
 - b. 1-2
 - c. 2-3
- 7. How much time in a day do you use your ActivBoard?
 - a. 15 minutes
 - b. 30 minutes
 - c. 45 minutes
 - d. Hour
 - e. More than hour
- 8. Which subject area do you use the ActivBoard most?
 - a. Language Arts
 - b. Math
 - c. Social Studies
 - d. Science
 - e. Other

- 9. What type of activity do you use most on your ActivBoard?
 - a. Flipcharts
 - b. Projection screen for document or video
 - c. Website with real world examples
 - d. Interactive games
 - e. Research skills
 - f. Differentiate Instruction
- 10. On a typical day, how many students per day manipulate or actively use the ActivBoard?
 - a. 0
 - b. 1-5
 - c. 6-10
 - d. 11-15
 - e. 16 or more
- 11. How often does each student have the opportunity to manipulate or actively use the ActivBoard?
 - a. Once a day
 - b. Once a week
 - c. Once a month
 - d. Never
- 12. Do students work independently on the ActivBoard without teacher direction?
 - a. Yes
 - b. no
- 13. What setting do you use the ActivBoard most often?
 - a. Whole group
 - b. Small group
- 14. What prevents you from using your ActivBoard most often?
 - a. Technical problems
 - b. Lack of training
 - c. ActivBoard placement in the room
 - d. Glare from the windows
 - e. Lack of planning time
 - f. Other, please specify
- 15. How much ActivBoard professional development have you participated in over the past three years?
 - a. 2 hours or less
 - b. 3-4 hours
 - c. 5-6 hours
 - d. 7 or more
- 16. What do you think you need most to help you involve students with the ActivBoard?
 - a. Observation of other teachers
 - b. Continuous In-service training
 - c. Team planning time for lesson planning
 - d. Blog or wiki website to share ideas with other teachers on staff
 - e. Other, please specify
- 17. If you could go back in time, what type of support would you want before using the ActivBoard in your classroom?

Appendix D

Teacher Focus Group Interview Questions

In participating in this group, you are agreeing to have results reported in an evaluation project for the University of West Georgia.

Interview Questions for ActivBoard use are:

- 1. What instructional methods do you use most often on the ActivBoard?
- 2. What are the positive aspects of using the ActivBoard?
- 3. What are the challenging aspects of using the ActivBoard?
- 4. Do students have the opportunity to manipulate the ActivBoard
 - a. With teacher direction?
 - b. Without teacher direction?
- 5. What are the positive aspects of students actively using the ActivBoard?
- 6. What are the challenging aspects of allowing students active participation with the ActivBoard?
- 7. What do you need to help you allow students active participation with the ActivBoard?

Appendix E

Focus Group Interview Findings

Themes	Findings
Technology Problems	 The alignment on the board is off and it needs to realignment. The teacher does not know how to fix technical problems. Teacher does not have time to fix the technology problems. Peripherals connected to ActivBoard are inoperable. The ActivBoard is not working.
Training	 The training was not enough of the subject taught. Training was too fast. The training was not appropriate for the grade or subject. The training was not frequent enough.
Positive Aspects	 ActivBoard engages students. ActivBoard brings the world to the classroom. ActivBoard allows scanning of documents to model handwriting on the exact same paper as student. ActivBoard allows teacher to access information quickly to share with the class. ActivBoard allow videos to been seen and accessed easily.
Barriers for student use	 Managing time for all student use When students are close to ActivBoard, they cannot always see entire board. They have to back up. When using it as a center, the teacher may have to stop what they are doing to fix it. Software not installed on home computer and unable to plan at home.
Needs for student use	 Time for teacher planning. Time for observation of teachers successfully using the ActivBoard with students and small groups. Time for training. Training tailored to a particular grade or subject. Time for teacher sharing.

Appendix F

Teacher Survey Results

1. Do you agree to participate in this study?		
	ı	
Yes, I will participate in this study.	24	100%
No, I will not participate in this study.	0	0%
2. 1. How many years have you been teaching?		
0-5	8	33%
6-10	4	17%
11-20	7	29%
21-30	3	12%
31 or more	2	8%
Total	24	100%
20-29	7	29%
30-39	8	33%
40-49	4	17%
50 or older	5	21%
Total	24	100%
4. What is your gender?		
male	0	0%
male female	0 24	0% 100%
female	24	100%
female	24	100%
female Total	24	100%
female Total	24	100%
Total 5. What grade student do you teach?	24 24	100%

6. How many years have you been using	an ActivBoard?		
0-1		4	17%
1-2		8	33%
2-3		6	25%
4 or more		6	25%
Total		24	100%
7. How much time in a day do you use yo	our ActivBoard?		
7. Now much time in a day do you use ye	ACTIVEDUATO:		
15 minutes		0	0%
30 minutes		4	17%
45 minutes		4	17%
Hour		2	8%
More than hour		14	58%
Total		24	100%
8. Which subject area do you use the Act	tivBoard most?		
Language Arts		9	38%
Math		8	33%
Social Studies		1	4%
Science	Equally used for math, science and social studies	1	4%
	I use it equally as much for Language Arts and Math		
	Both math and science Both Language & Social Studies!		
Other, please specify	Both Language & Social Studies!music	5	21%
		24	

9. What type of activity do you use most on your A	ctivBoard?		
Flipcharts		14	58%
Projection screen for document, PowerPoint, or video		1	4%
Website with real world examples		2	8%
Interactive games		4	17%
Research skills		1	4%
Differentiate Instruction		1	4%
Other, please specify	flipchart and projection are used the most equally	1	4%
Total		24	100%
0		1	4%
10. On a typical day, how many students per day n	nanipulate or actively use the ActivBoard?		
5-Jan		4	17%
10-Jun		6	25%
15-Nov		4	17%
16 or more		9	38%
Total		24	100%
11. How often does each student have the opportu	nity to manipulate or actively use the ActivBoard?	14	58%
Once a week		8	33%
Once a month		2	8%
Never		0	0%
Total		24	100%
Total 12. Do students work independently on the ActivB	oard without teacher direction?	24	100
, , , , , , , , , , , , , , , , , , , ,			
yes		8	33%
no		16	67%
Total		24	100%

13. What setting do you use the ActivBoard mo	ost often?		
Whole group		22	92%
Small group		2	8%
Total		24	100%
14. What prevents you from using your ActivBo	oard most often?		
Technical problems		6	25%
Lack of training		6	25%
ActivBoard placement in the room		0	0%
Glare from the windows		0	0%
Lack of planning time		8	33%
Other, please specify	 nothing Distracts other groups during small group instruction time when my bulb is taken to use in another room. 	4	17%
Total		24	100%
15. How much ActivBoard professional develop	oment have you participated in over the past three years?		
2 hours or less			
3-4 hours		10	42%
3 + Hours		10	42% 42%
5-6 hours			
		10	42%
5-6 hours		10	42% 8%
5-6 hours 7 or more	ou involve students with the ActivBoard?	10 2 2	42% 8% 8%
5-6 hours 7 or more Total	ou involve students with the ActivBoard?	10 2 2	42% 8% 8%
5-6 hours 7 or more Total 16. What do you think you need most to help you	ou involve students with the ActivBoard?	10 2 2 24	42% 8% 8% 100%
5-6 hours 7 or more Total 16. What do you think you need most to help you observation of other teachers	ou involve students with the ActivBoard?	10 2 2 24	42% 8% 8% 100%
5-6 hours 7 or more Total 16. What do you think you need most to help you observation of other teachers Continuous In-service training		10 2 2 24 24	42% 8% 8% 100% 4% 50%
5-6 hours 7 or more Total 16. What do you think you need most to help you observation of other teachers Continuous In-service training Team planning time for lesson planning Blog or wiki website to share ideas with other	Time to create and time to work with other music teachers in the county. Having the inspire software on my home computer	10 2 2 24 1 1 12 7	42% 8% 8% 100% 4% 50% 29%

17. Tagged results for: If you could go back in time, what type of support would you want before using the ActivBoard in your classroom?

Training	14	58%
Other	10	42%
Total	24	100%

Respondent # and Response

1

Like everything else, time is the problem. I know there are more ways to utilize this fabulous teaching/learning tool, but my time has to be spent analyzing tests and other countless documentation tasks, so less is spent on creative lesson planning.

I would like inservice...with "how tos" that actually build something I could use the next day in class. I don't need a summary of all the things it can do. Instead, I would love the tech support fairy to create templates, and do searches that help match our standards. Sometimes it is a matter of finding time to create the questions for the activotes, or finding the best site. The resources are there, but finding time to build the flipcharts is tough considering the software is on my school computer. Also, number 9.... I have more than one answer. I use it with flipcharts, research, united streaming, and projection screen.:)

3 More flipcharts already created for standards for specific grade level.

 $\label{lem:meaningful} \mbox{Meaningful training and time to use the training toward making appropriate flipcharts for the classroom.}$

I would like training on trouble shooting, when things go wrong with the activeboard, the necessary steps to try to fix it myself.

I had a thorough training the summer before I got mine so I felt that I was pretty prepared to use it. However since the upgrade to activinspire, I don't feel as comfortable as I used to.

7 Training to begin with. I had NO training at all.

9

Training and resource information

A quality, hands-on workshop teaching about the most up to date websites with resources and how to build flipcharts beyond the basics.

11

More training to fully utilize the ActivBoard.

12

creating flip charts

13

I would like to learn everything that one could do using the active board.

14

support from other teachers in the county that could share flipcharts and lessons they use on the ActivBoard. I was provided very little training on how to use the ActivBoard before it was installed.

15

Observe other music teachers already using the ActivBoard in their classrooms.

I would have liked more support on using the tools in a variety of different ways.

16

I had training on the ActivBoard as soon as they had mine installed so I never felt like I didn't understand it. However they've changed the program since that so it has taken some getting used to in the past year.

17

In-service training on how to effectively use the ActivBoard in the classroom.

ACTIVBOARD USE

10

Since programs continually change, it would be beneficial to yearly training. It would also be great if they could training for each grade level. That way flip charts could be created to use in their room. Usually during training, you are taught about many different functions. If the team could apply the skills as they are learning them it might help them feel more confident.

19

When the ActivBoard was installed in my room, I did not have training. I had no idea how to use the board. Other teachers showed me the basics. A class on using the board would have been helpful when it was installed. I thought this would have been offered through the company. I now use the board more often and have learned more about it. I recently learned how to scan documents and show them on the board, which is helpful for whole group instruction.

20

Students go to a training class.

21

More training

22

I would like the ActivBoard software on my own computer so I can make flipcharts from home.

23

an assistant in the room How to use the internet more efficiently

24

Training