

SMART Interactive White Board Audit

I set out to discover how effectively our Interactive White Boards (IWB), SMART board technology, are being used throughout our building. About two years ago, our fifth grade team applied for (and won) a 21st Century Learning Morgridge Family Foundation Grant that supplied each member with a SMART board. As per our grant agreement, my teammates and I attended a year's worth of professional development around using and sustaining SMART technology in our classrooms and building. We learned everything from basic lesson design, to more advanced techniques for getting higher student engagement using the technology.

Project:

One year after our SMART boards were installed, our school's principal, along with the Parent/Teacher/Community Organization (PTCO), decided to use budget and raise matching funds to install a SMART board in every working classroom. However, this influx of technology came with no planned professional development, aside from basic operation. I became the building's SMART board technical support for any and all issues IWB related. A year later, I do not see much 21st Century learning and innovation skills being used in the classroom. Unfortunately, I feel that many of the SMART boards have become very expensive projector screens and that the accompanying software used to create interactive lessons for the SMART board is being used to create glorified overhead transparencies. I needed to find out for sure.

Procedures:

I began by using the IWB survey adapted from work by Dr. Jo Williamson at Kennesaw State University in Georgia and LISA REED at the University of Colorado. I wanted to see which types of IWB activities (if any at all) are being used consistently throughout our building. I wanted to use this data to not only approach our new administration with a Functionality, Equity, Age, Repair/Maintenance Burden (F.E.A.R.) based analysis of our building's technology professional development, but I also wanted to use this information to create a building technology plan, which would incorporate the 21st Century pedagogy I feel is essential.

I explained the IWB surveys to our new principal and assistant principal, and my purpose of this audit. I wanted them to enlist the help of a few teachers' assistants (TA's), parent volunteers, and other adults in the building in order to get a very objective look at how this technology is really being used in my building. In one week, they surveyed all 30 classrooms and subtly observed how the SMART boards were being utilized.

Once I collected my data, I immediately set to work on analyzing the results so that I could present it to my administration, and even the staff. I coded the results and created a visual chart to display my findings.

Obstacles:

There were two things that impeded my SMART board audit.

1. Our school currently runs on a year-round calendar. This makes it difficult to survey the entire staff within a short time frame. At any given time, only 75% of the staff is actively working in the building. The other staff members are “off-track” meaning that they are on contracted vacation days.
2. Our staff is very “observation wary.” We have had a history of administration mistrust and unfortunately, this is evident in how teachers react to any administrative person in the classroom. Many times, instruction stops completely when a principal or assistant principal enter the room. I believe this may slightly skew some of the results.

Findings:

This chart displays the results of my audit. There is one IWB per classroom.

Classroom	Grade Level	Track	C Inconsequential Use	A+E Low Levels of Transfer	B+G Mid Levels of Transfer	D+F High Levels of Transfer
K1	KEP	N/A	7	6+5	4+3	2+1
K2	K	A	7	6+5	4+3	2+1
K3	K	B	7	6+5	4+3	2+1
K4	K	C	7	6+5	4+3	2+1
11	1	C	5	4+3	6+7	2+1
12	1	A	6	5+4	3+7	1+2
13	1	B	5	4+3	6+7	2+1
14	1	B	4	3+2	5+7	1+6
21	1	D	5	4+3	6+7	2+1
22	2	C	3	2+1	7+6	4+5
23	2	B	2	3+1	6+7	4+5
24	2	D	4	3+2	7+6	1+5
31	3	C	3	2+1	4+5	6+7
32	3	D	5	4+3	1+2	6+7
33	2	A	3	2+1	6+7	4+5
34	2	B	2	3+4	7+5	1+6
41	3	A	2	4+3	1+6	5+7
42	3	B	3	4+2	5+1	7+6

43	3	B	2	1+3	4+5	6+7
44	4	B	2	3+1	4+5	6+7
51	4	D	3	2+1	5+4	7+6
52	4	C	2	4+3	1+5	7+6
53	4	A	2	3+4	1+5	6+7
54	4	B	3	2+1	4+5	6+7
Mobile 1	GT	N/A	5	4+3	1+2	6+7
Mobile 2	5	B	2	5+4	3+1	6+7
Mobile 3	5	A	2	3+4	5+6	1+7
Mobile 4	5	D	1	2+3	4+5	6+7
Mobile 7	5	B	2	3+4	5+1	6+7
Mobile 8	5	C	2	3+4	1+5	6+7
TOTAL: 31			AVERAGE: 3.5	3.4+2.8	3.8+4.5	3.9+4.8

My IWB audit revealed a couple of patterns worth noting:

1. The installed SMART boards tend to be used more frequently and with higher levels of transfer and engagement in the upper elementary grades (3-5).
2. At the time of this audit, 100% of the four total Kindergarten SMART boards were turned off and not being used at all.
3. As a school, the average scores indicate that High levels of transfer and engagement scored the highest scores, indicating more frequent use; whereas the Low levels of transfer and engagement scored the lowest scores, indicating less frequent use.

Lessons Learned:

I learned that a technology audit is vital to establishing a technology plan. You must be able to adequately assess where the building is in terms of hardware, software, professional development, etc.... before you can determine what is to be done next. In the case of my Elementary school, we have plenty of SMART boards (one per classroom). Our next steps are around professional development on how to use the SMART board software (Notebook), and the SMART board itself to increase the levels of transfer and engagement among students. Also, I

feel that our administration needs to establish an accountability system, whereby teachers are held to the same standards we hold students: you must prove that you are able to proficiently use the concepts (in this case, technology) consistently. In order for the most authentic learning increase, I am unsure whether the accountability system needs to be evaluative.

A system that evaluates teacher performance on the use of technology can definitely increase the extrinsic motivation behind using technology well. However, there is also a great chance for backlash among the staff, especially at our school. Unfortunately, our staff does not take directives well. So, there must be a way to increase the staff's intrinsic motivation behind *wanting* to increase their SMART board performance.

Next Steps:

I plan to present this information to our principals. I will outline my findings using F.E.A.R. phrasing. I want my principal and assistant principal to feel that this is necessary to increasing student performance across content areas.

I want to discuss my options for creating professional development around SMART board training. I want to move beyond just beginner "how-to" sessions, and move toward advanced use for student engagement. I feel that it will be important to share my findings with our staff at some point, so that they are involved in our collective increase of technology abilities. I will let my administration be a guide for how best to approach this task.