STRATEGIES FOR SELLING INTERACTIVE WHITEBOARD TECHNOLOGY
DEMONSTRATING THE ADVANTAGES & VALUE FOR EDUCATION
INTRODUCTION
The education market is the biggest user of Interactive Whiteboards (IWB) and for good reason. The desire to develop 21st century skills for students, the requirement for educator proficiency in technology and research documenting increased learning with the use of interactive whiteboards have encouraged adoption. Research has repeatedly demonstrated that students learn better when they are fully engaged and that multisensory, hands-on learning is the best way to engage them. Interactive whiteboards enable multisensory learning whether it is a collaboration exercise for math problem solving or a Google Earth tour of the Amazon rainforest. According to a new market research report “Interactive Display Market by Product (Interactive Kiosk, Whiteboard, Table, Video Wall, Monitor), Application (Retail, Education, Healthcare, Entertainment), Panel-Size (17” - 32”, 32”- 65”, Above 65”), & Geography - Global Forecast to 2020”, published by MarketsandMarkets, the total interactive display market is expected to reach $14,964.5 Million by 2020, at a CAGR of 12% between 2015 and 2020. This article outlines what IWB platforms consist of, how they benefit students and teachers, applications and popular products and cost benefits. Resellers will gain an understanding of the value of the market, how to demonstrate IWBs, selling strategies, benefits of selling these products and the right way to follow-up after the sale.
WHAT IS AN IWB?

An IWB combines a dry erase whiteboard with an LCD projector and is usually mounted on a wall or floor stand. Powered by easy-to-use software, the whiteboard becomes a computer screen that can be viewed by an entire classroom. The projector shows the content from a computer onto the surface of the board while the instructor controls the information either with a pointer or a touch of the hand instead of a keyboard and mouse. Items can be dragged, clicked and copied and the lecturer can handwrite notes, which can be transformed into text and saved. The combination of software with the projector results is much more than just a projected image.

Anything that can be done on a computer monitor can be reproduced on the interactive white board. A teacher can create interactive lessons that focus on tasks such as a matching activity where students use either their fingers or a pen to match items. Another teacher might integrate multiple items into a lesson plan that may include websites, photos and music that students can interact with, respond to verbally or make comments on by writing on the board. Image size and placement can change with a simple touch to the screen. This technology makes the one-computer classroom a workable instructional model.

BENEFITS FOR STUDENTS

The interactive electronic whiteboard is a colorful tool. Research indicates that students respond to displays where color is employed and marking can be customized both in the pen and in the highlighter features to display a number of different colors. Tactile learners can benefit from touching and marking the board, audio learners can have the class discussion and visual learners can see what is taking place as it develops at the board. Students with limited motor skills can enjoy board use. Because of large format, it may be easier for students to run programs by tapping on the board rather than mouse clicking. Also, teachers with young students report success having them write on the board with their fingers rather than the stylus. Other benefits for students include:

- Students are more focused on their learning when teachers used an IWB.
- Students become highly engaged when there are opportunities to work directly on an interactive whiteboard.
- The use interactive whiteboards decreases distraction by focusing students’ attention on lessons.
- IWBs enhanced language lessons when teachers use visual aids to reinforce vocabulary and grammar lessons
- Spontaneous lessons are easily supported with an interactive whiteboard.
- Student engagement significantly increases when an IWB is used in conjunction with a classroom audio system.
COOL APPLICATIONS

There are some great applications for use with IWBs; most product manufacturers have a library of resources for educators to use. Some of the coolest applications that students love include virtual field trips, games and interactive simulations, as outlined below.

• **VIRTUAL FIELD TRIPS** – Field trips can be amazing learning experiences. They provide students with the opportunity to actively participate in education, offering learning possibilities that aren’t always available in the classroom. In today’s environment, it isn’t always practical or possible to take students on field trips. Tight budgets, location, transportation, time and resource restrictions can keep students from venturing outside of the school for learning trips. Virtual field trips can fill this void. Examples include:
  - A trip to the planetarium is a great way to gain students’ interest in the solar system. Instead of visiting the planetarium, use an IWB to go on a virtual field trip that shows them the planets and constellations. Have students use the information they learned as a way to research more about the planets or constellations so that they can create a presentation that they can share with the class.
  - The Smithsonian Virtual Museum is amazing when viewed using an IWB. Students can ‘step’ into the exhibits and take a tour through the entire museum in a 360 degree environment. The virtual museum is made up of panoramic pictures of the actual exhibits inside the Smithsonian. Camera icons throughout the museum show students hot spots where they can get close to an exhibit panel. As students explore the museum, they can see oceans, dinosaurs, fossils, plants, mammals, reptiles, insects, butterflies, bones, geology, gems and minerals.
  - Students can take a trip to the moon virtually using Moon view in Google Earth 5.0. Moon in Google Earth lets students to take tours of Apollo missions to the moon, narrated by Apollo astronauts. Students can investigate 3-D models of landed spacecraft, get up close views of astronaut footprints on the moon, watch rarely seen TV footage of the Apollo missions and explore the lunar surface. Educators can guide students using an interactive whiteboard. Upon completion of the tour, students can tell others about their mission to the moon or write a newspaper article about their exploration.

• **GAMES** – Educational games in math, social studies, language, science, music, art and business are available for IWBs and students love them, as do teachers. Learning games can be set up in the format of Jeopardy, Who Wants to Be a Millionaire and other popular TV game shows to allow kids to show teachers how much they have learned, making practice tests fun and engaging. Any game available on a PC can be used with an IWB. Some examples follow:
  - **Alphabetical Order** – With this game, have students manipulate lists of words to put them in ABC order.
  - **Building Language for Literacy** – This site provides several games that allow students to practice vocabulary and rhyming while learning words having to do with places around a community.
  - **Clifford Interactive** – Primary students love the interactive stories on this site as well as the interactive word work games like Make a Word and Sound Match. These are great to use as center Story Scramble – Having students work together at the board to sequence the short stories is an excellent way to use your interactive whiteboard.
  - **Beacon Learning Center’s Student Web Lessons** – These are comprehensive lessons in which students interact with the text as they read. This lesson works on finding the main idea.
  - **Bio-Cube** – Here is an attention-getting way to have your students write more interesting biographies. They click around and add content, like their biggest obstacle and a famous quote, to each side of the cube. A bonus is that the activity prints so that it can be folded to create a real cube.
  - **Fish ‘Em Up!** – In this interactive game, students learn about doubling the letter or changing the y when adding an ending to a word. Students need to decide which fishing pole correctly spells the word made from the given base word.
  - **Flashlight Readers** – After reading favorite books, students can complete interactive activities based on them, creating a Because of Winn-Dixie scrapbook, for instance or going on a Holes treasure hunt.
  - **Free Rice** – Practice your vocabulary while you donate rice to people in need all around the world.
  - **Greek Word Roots** – Have students play archery as they use the meaning of the Greek root to identify the definition of a word. You can use this as your lesson on Greek roots and have whole class discussions as students play on the whiteboard.
  - **Analogy Battle Ship** – Have your class play against the computer to determine cause-and-effect or part-to-whole relationships.
  - **English Grammar Activities** – This Web site has a huge number of activities to assist in teaching all different types of grammar lessons.
  - **Picture Writing Prompts** – These writing prompt photographs and word lists will get your students excited about writing.
  - **Plot Diagram** – Watch a demo and then have your students complete this online plot diagram for a story you are working on in class.
  - **Beacon Student Web Lessons** – In addition to the mid/upper elementary lessons highlighted above, this site provides a range of lessons for K–12 students.
  - **Story Starters** – Students love clicking the handle and spinning the story starter machine. They giggle at the silly writing prompts while they find their desired one. Then they write creative stories to share with the class.
• **INTERACTIVE SIMULATION** – Interactive whiteboards allows teachers to run simulations, play videos and demonstrate using animations, keeping students thoroughly involved. Some great interactive simulation sites include:

  • **PhET** - interactive simulations : The University of Colorado has produced some java-based physics simulations for KS3 and KS4 science, allowing students to learn in a familiar and detailed way.

  • **KScience** - This is a simple site that provides many different Flash animations for KS3/4 Science. A toolkit can also be downloaded that allows teachers to produce their own animations giving students individualized and interactive science lessons.

  • **Phun** - This is the only one of the sites above that you can’t use immediately online. Teachers need to download this to their computer. Phun is an amazing, free physics simulator. Teachers can draw objects directly into the world then make them behave in different ways. Students who learn with this tool have an advantage over traditional methods.

• **BENEFITS FOR TEACHERS** – Teachers love IWBs for so many reasons. All good teachers love to learn new strategies and methodologies and just the lack of chalk dust alone is one major reason to enjoy IWBs. Other reasons follow:

  • Teachers can view a guide that will help them develop an entire lesson plan around an activity. While many teachers spend hours a day creating their own activities for their interactive whiteboards, there are many free sources to help teachers learn about and use IWBs with students to further their use of technology in the classroom.

  • Digital storytelling using and IWB can enhance understanding and makes it easier for teachers to get their point across.

  • IWBs can be used by teachers to create, view and annotate PowerPoint presentations in real time.

  • Streamed or downloaded videos can be shown, eliminating the hassle of a film projector in the classroom.

  • Instructors can use online map and satellite imagery to teach geography, bringing their lessons to life in 3D instead of using an old-fashioned globe.

  • Artwork or online museum presentations can be shown to classes, limiting the expense and time required for class field trips.

  • Film teachers can use IWBs to demonstrate moviemaking techniques to the entire class at one time.

  • Phys Ed teachers can use IWBs for viewing and critiquing competitive sports and physical education activities on a big screen.

  • Teachers can instruct students how to conduct research on the Internet by showing the class techniques to everyone at once.

  • Teachers can work collaboratively with students on writing and editing exercises, math lessons and science experiments.

  • Instructors can educate the class on the use of a software program and other computer skills without having to go around to each student’s personal computer.

  • The number of personal computers in the classroom can be reduced with IWBs. This can limit cost for hardware, software and updates as well as reduce distractions and technical problems.

  • Lessons can be recorded for substitute teachers to use.
APPLICATIONS TEACHERS FIND PARTICULARLY USEFUL

CLASSDOJO – This app lets teachers emphasize positive feedback, allowing them to critique the behavior of their students with comments such as “working hard” or “participating.” They can send parents public and private messages about their child’s progress and. No school newsletter or notes to parents required.

EDMODO – This free application allows teachers and students to share content and use the app as a way to provide new information or notifications, turning in assignments and receiving grades. The ability for teachers to post assignments, messages, surveys and quizzes while providing access to the required resources and calendars is extremely valuable.

TEACHER’S ASSISTANT PRO – It’s not always easy to keep thing organized in the classroom, but this teaching application allows instructors to keep a set of behavior records for each student, providing a quick method for looking up and noting bad behavior and letting them email specific incidents from directly within the app.

EDUCREATIONS – This interactive whiteboard app allows teachers to build easy-to-follow lessons for students. They can record audio to narrate their actions allowing them to show diagrams, commentary, animations or instructions.

TED – The organization’s official app houses hundreds of intriguing TED Talks, featuring lectures from industry and subject matter experts spanning a wide collection of topics (neuroscience, traditional folk music, human evolution, etc.). Some of them are perfect for stimulating classroom discussions and debates, while others can serve as tool for educators creating new lesson plans or lectures.

IWB PLATFORM EXAMPLES & APPLICATIONS

SMART KAPP – SMART kapp iQ is an Ultra HD enabled display and includes Silktouch™ technology, an accurate, natural and responsive touch experience from corner to corner. Pen iD™ allows users to write independently and simultaneously, using differently colored digital ink. Object awareness™ allows the display to differentiate between a finger, pen or palm so users can touch, write and erase naturally. The commercial-grade, glare-free LED panels allow for detailed content, as well as support HD and SD content. Connected via HDMI cable, kapp iQ can be used as an Ultra HD display and users can present and ink over any content on the touch display. Remote users can write on the display in real-time from any device. Connect any Android or iOS device to SMART kapp iQ and teachers can share and save to any connected laptop, tablet, smartphone or other SMART kapp IQ display. Teachers can connect with the display through the SMART kapp app in a single step, and since only one person needs to connect to share the meeting with participants, live sessions can be hosted between multiple SMART kapp IQ displays across remote locations. SMART kapp iQ is available in two sizes: 55” and 65” (diagonal) and all teachers have to do is plug it in. Installation is quick and easy, with no IT integration required. SMART kapp iQ powers-up automatically using Proximity Detection that can sense the presence of users. Up to 250 participants may join a session with the SMART kapp Plus subscription. Any participant can capture and save notes as snapshots (JPEG or PDF) and store them within the app or on Evernote™ archive tool and for simple distribution. PIN codes can be used to enhance security. Teachers can choose any session they want from the kapp app library, called Smart kapp Exchange. Applications for any grade and any subject are available, including some teacher recommended apps like:

- Smartboard Attendance – Attendance files for each month with holiday themes and subject matter specific.
- Behavioropoly – Classroom behavior management used to help reinforce positive behaviors
- Fractions – Learn about fractions and how they are used in everyday life.

DELL – The Dell Interactive Projector S520 is an interactive projection with HD resolution, 3,100 lumens brightness and wireless capabilities. Teachers can engage and collaborate using multi-touch, interactive presentations and learning sessions with up to 10-point touch capability. Instructors can use their fingers, the included styluses or traditional dry-erase pens on the 87-inch whiteboard to enable real-time learning. Teachers can share learning modules, websites and other applications through the S520, as well as engage active classroom participation with the large, interactive touch screen. Teachers can interact with Windows 8 gestures, apps and charms to further interact with their classes. Optional WiFi connectivity offers wireless compatibility for most laptops, smartphones and tablets. Presentations can be projected without a PC. The S520 has up to 2GB2 internal flash memory or from up to 32GB2 using a USB flash drive and includes two built-in 10W speakers. The S520 is the complete interactive projection solution that is designed for easy, precise installation of the projector, wall mount and whiteboard. The S520 projector includes:

- Interactive projector
- Remote control
- Custom 87-inch dry-erase whiteboard
- Wall mount
- Laser curtain
- Two styluses

Google Apps for Education allow students and teachers to access, edit, save and share their digital assets such as presentations, documents, photos and videos even if the original documents are located on separate PCs or networks.
LG – LG’s 84-inch Ultra Definition (UD) LCD interactive whiteboard allows teachers to use it as a new tool for teaching their students. The panel measures a massive 1.9 x 1.1 meters (74.8 x 43.3 inches), dimensions similar to those of traditional whiteboards. The brightness is 350 nit, which is 3.5 times brighter than that of current projector-type interactive whiteboards, making it easier for students to see and interact with the whiteboard, even if they’re sitting in the back of the classroom. This also means that teachers no longer need to turn off the lights as they would with a projector-based whiteboard. Students no longer need to worry about blocking the projector with their shadows; Students can move about the classroom, without their heads blocking the view for classmates. The screen’s resolution is 3,840 x 2,160 (about 8.3 million) pixels; about eight times the resolution of current HD projectors used in many classrooms. The interactive part of the whiteboard comes from the touch screen support, which allows teachers and students to annotate directly on the screen. Upon request, the screen can be outfitted with Film Patterned Retarder (FPR) 3D technology. This brings wide viewing angles and requires the use of special glasses. Third-party teaching tools are supported.

VIEWSONIC – The ViewSonic CDE8451-TL is an 84” 4K Ultra HD interactive touch display. With four times the detail of Full HD displays, the CDE8451-TL is ideal for higher education, as well as for scientific applications. The 10-point touch-enabled display allows up to ten users to simultaneously write or draw on the display’s surface using their fingers or styluses. The large-format LED screen and Ultra HD 3840 x 2160 resolution provides the ultimate in color, clarity and image detail. Equipped with a tempered glass overlay, anti-glare treatment and rounded corners, the CDE8451-TL is designed for heavy usage in high-traffic areas. The ViewSonic CDE8451-TL Ultra HD interactive touch display is a great solution where ultra-high resolution imaging and touch interactive capabilities are needed. A rounded-corner design provides a safer learning environment for students by helping to prevent injuries in the classroom. The ViewSonic CDE8451-TL features 7H scratch-resistant surface hardness that ensures durability. In addition, an anti-glare film improves screen visibility in bright environments. ViewSonic’s easy-to-use ViewBoard software comes pre-installed on all CDE8451-TL displays. This software allows teachers to write, highlight, edit and transform documents and images on-screen in real-time. It also features screen recording, magnifier and spotlight features that make presentations, classroom learning and distance education more productive. The ViewSonic CDE8451-TL features an energy-saving LED backlight with a lifespan of over 50,000* hours and more than a decade of durability. This lowers power consumption and the cost of ownership, while producing a high ROI, making these products a great long-term investment. The CDE8451-TL includes 3 styluses that can be used to write on the display. Although the CDE8451-TL can be wall mounted for a solid and safe user touch experience, a trolley mount (LB-STND-003) is also available that provides the flexibility of a mobile display. Third-party teaching tools are supported.
COST BENEFITS OVER CHALK BOARDS AND TRADITIONAL WHITEBOARDS

There are many benefits to implementing interactive whiteboards in classrooms. These range from soft benefits to hard cost ROI. Some of these are outlined below:

SOFT BENEFITS – In addition to the elimination of messy chalk dust and markers, today's technology is offering teachers a host of options: E-mail, the Internet, electronic grade books and course websites for use with IWBs. These interactive boards allow teachers to draw, type, surf the Internet or present lectures with “touch screen” technology. Instead of erasing lessons from the board, teachers can print the lesson for the students, and use them as handouts. Lessons can also be created in advance for substitute teachers, preventing wasted time. In the classroom, a teacher can grade student papers from a disk and highlight grammar or punctuation errors. The students can then correct the errors in real time by working in groups not only with the technology but also with fellow students and the teacher. Students are more likely to be excited about coming to school to learn with interactive tools and test grades are often improved using this method of teaching.

HARD ROI – Instead of providing students individual PC’s, laptops or tablets, one PC in the classroom can provide the connection to an IWB for the whole class, saving the school district a lot of money. IWB require less cabling, servers, routers and bandwidth than desktop PCs do, as well as less technical support, installation charges and maintenance. Costs can also be reduced by reducing the number of field trips and “visiting” important locations using the Internet and IWBs. Because test scores are better for many classrooms using IWB technology, school funding will be positively impacted as well. Teachers can save time by using on-line lesson plans and downloading them directly to the classroom; time always equates to money.

FOR RESELLERS

HOW TO GET IWB’S INTO THE SCHOOL BUDGET
Funding to meet the costs of buying and sustaining interactive whiteboards over time needs to be built into schools' budgets. Interactive whiteboards are a powerful tool in the hands of teachers and the evidence from the Primary Schools Whiteboard Project suggests that they are worth funding. Funding classroom technology is always a concern when discussing implementation of whiteboards and other technologies in the classroom. Resellers can help by educating customers about education technology grants, fundraising and engaging the community.

EDUCATION TECHNOLOGY GRANTS
The first place to look is Grant Wrangler which provides a mechanism for education technology grants for K-12 schools or subscribe to their bi-weekly newsletter featuring the latest grants and awards. Another site is GetEdFunding.

FUNDRAISING IDEAS
Resellers can discuss fundraising ideas with schools to raise money for technology investments. Some popular sites are Mixed Bag Designs, LockerWorx and Pexagon.

COMMUNITY ENGAGEMENT
Once a reseller has the interest of the school board, a demo should be set up that includes school decision-makers, parents and teachers. Demonstrating the product at local teacher shows will garner interest as well. This will provide support for the adoption of the technology, allowing it to be added into the budget.

DEMONSTRATING IWB
The real opportunity for dealers is offering curriculum-based lesson plans. The future of this market is solid. So when demonstrating IWBs, focus on comprehensive lesson activity from beginning to final assessment. When showing the hardware, focus on the unique benefits of the product that is being sold, from the size or definition of the screen to the library of lesson plans and tools available to teachers. Show how much time can be saved for teachers, demonstrate how much fun students have using this technology and show feedback tools. These ideas will help resellers dazzle educators, students, parents and decision-makers.

SOLID IMPLEMENTATION AND FOLLOW-UP
Companies are making IWB sales, especially if they can provide educators with a suite of services, accessories and software beyond the board itself. Ensuring that the system is installed smoothly, all documentation is handed off and all questions are answered will enable users to get the most out of the purchase. It is important to set up a center of excellence for the customer so that educators can share ideas and resources. Resellers should contact the customer regularly after the sale to provide updates, new resources and increase sales.

MARKETING THE SUCCESS STORY
Once a school or district is successful and happy with their use of the IWB they were sold, interview power users and publish success stories on dealer, educator and student websites and publications. This will create additional leads for salespeople. Gain permission from power users to act as references for new leads.
CONCLUSION

An IWB is today’s best tool for meaningful, classroom-wide technology integration. They provide engaging, multimedia technology that appeal to today’s students. The boards become a platform for making lesson plans come alive. Teachers can add a high level of interactivity, color, motion, audio, video and embedded flash to engage classrooms and keep student’s interest. Teachers who embrace this technology find they can offer a more enriched and interactive learning experience to the true benefit of the students. Resellers that have educated themselves on outstanding community involvement, demo skills and funding options are likely to be the most successful in the industry.

For more information on how Ingram Micro can support IT resellers, please contact the Ingram Micro Unified Communications team at Unified.Communications@Ingrammicro.com or Call 1-800-456-8000 ext. 66612

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