



Classroom Management Software for Windows and Android Devices

November 2014

In digital learning environments tablets offer unique pedagogic opportunities. Today many schools have introduced tablet-based classrooms, with Android emerging as the technology of choice. However, without effective management they can easily become a teacher's worst nightmare, disrupting, rather than aiding learning. Radix SmartClass software, uniquely for the Android-based classroom, fully facilitates teacher monitoring and control of student tablet activities.

How it works: Radix SmartClass is based on the Wi-Fi network of the classroom with no server or internet connection required. Students enter the class and work from their designated tablet. The teacher has their own laptop or tablet with the Radix SmartClass management software installed on it. The students simply connect to the class by selecting the teacher's name or the name of the class they need to join. Wi-Fi connection means SmartClass fully integrates with and enhances whatever existing technology and



pedagogic approach the school has. Whether a 1:1 initiative, whiteboard or tablet storage carts being moved between classrooms SmartClass is instantly available and seamlessly integrates with class teaching: No user registration, account setup or purchasing/installing of infrastructure, software, 3rd party devices or middleware required.

SmartClass creates a new form of collaborative learning environment. Teachers can see live and real-time events, based on every individual student's screen activity. Anything on screen whether a game, website or word document can be monitored and shared. This is one step further from alternative collaborative software which require every device to be working on the same application or website. In the SmartClass classroom each student can work on a different application or document and perform research in any approved website. The teacher can not only see all of their screens in real-time, but can choose any screen to share with the other students. Therefore the tablet itself becomes a collaborative tool at the operating system level, not limited to the application level.



The Radix SmartClass software enables Android tablets already existing in the classroom to be used to their greatest pedagogic potential: In learner-led activities, collaborative learning and interactive learning; all while the teacher stays in full control of all student activities in the classroom. The software emphasizes the ability for students to collaborate and be independent learners, while teachers can monitor each student's progress and help them privately or demonstrate their work in front of the whole class. Keeping students on-task, the software allows teachers to ensure students don't get distracted or have access to inappropriate resources.

With Radix SmartClass all students' Android and/or Windows tablet activities can be managed in the interests of learning – all from the teacher's own Android mobile device or laptop. Radix SmartClass software empowers teachers to not only convey an enriched educational experience and keep students on-task, but also to ensure individual attention and discrete assistance can go to the students who really need it.

What makes SmartClass so relevant for today's classroom is the ability to transform students' Androids, as well as other Windows tablets into a rich 21st century learning environment. Android tablets represent the long-term technology trend in education, fast replacing all other student devices in class. Radix SmartClass is the only solution that allows teachers full management of the Android classroom as an add-on app to the tablets.

The fact that Android technology engages and excites students can and should be harnessed for the purposes of education. However, open access to such a platform, especially with the availability of the Internet and game applications, can pose a risk to effective learning. Focusing students on task and monitoring their activities for help is a must. As such, Radix SmartClass can facilitate dynamic and mobile learning:

Students can easily connect to the classroom Wi-Fi network, while the teacher stays in control, using his own mobile device to freely move around the classroom and coordinate student activities (without requiring extra hardware or third party applications).

SmartClass provides a platform for teacher and student, as well as student and student collaborative learning. Teachers can show their own screen and broadcast video presentations to students. Equally teachers can present a selected student's screen to the rest of the class, as well as sharing students' screens with each other. Educating in this manner can motivate and empower students' learning, but teachers can always keep the class on-track via real-time screen (each student's live screen is shown as a thumbnail in real-time on the teacher's screen) monitoring, supervising or limiting Internet activities and much more.

SmartClass functions

Demonstrations:

- **Screen broadcast:** Broadcast teacher's tablet screen to student tablets
(See more on the SapphireCast screen sharing engine)
- **Collaborative interactive whiteboard:** Open a virtual interactive whiteboard in students tablets, enabling simultaneous collaborative work of the teacher and the students on the same virtual whiteboard
- **On screen annotation:** On screen tool for real time annotation while sharing screens
- **Lesson planner:** This live lesson planner allows teachers to create and execute a pre-planned lesson agenda which is interactive and flexible, happening in real-time according to a pre-defined schedule.
- **Video broadcast:** Broadcast and stream video files to the class
- **Synchronized Video:** Play HD quality video on all student devices with a nanosecond level synchronization between all players



Monitoring:

- **Remote control:** Control students' tablet screens remotely
- **Student demonstration:** Broadcast and share selected student screen to the class
- **Students thumbnails:** View student screens in small thumbnails on teacher's device
- **Slide-show:** View a cyclic slide-show of student screens and set the cycle interval
- **Chat:** Group and individual chat and discussion center
- **Remote messages:** Send on-screen pop-up messages to the class



Keeping students focused, on-task

- **Lock screens:** Teacher can lock the tablet's screens for attention, displaying a message at the top of the screen
- **Block Internet:** Block the web browsing on students' tablets
- **Lock application:** Select applications from a list and lock them from future use
- **Co-browse:** Launch and enforce a web page remotely and co-browse the internet with the class
- **Send and collect files:** Teacher can send files to and collect files from the students' tablets
- **Co-browse e-books:** Teacher and students can co-browse e-books, the teacher can force a selected page and force students to the selected page



Management

- **Password protect student:** Protect the student application from being stopped or uninstalled by using a password
- **Password protect teacher:** Protect the teacher application login and launching by using a password
- **Log-on/off:** Remotely Log-off and Log-on students tablets
- **Shut-down:** Remotely shut-down and restart students tablets
- **Sleep:** Remotely put tablets to sleep mode
- **Wake-up:** Remotely wake up students tablets
- **Remote install:** Remotely install applications on student tablets
- **Set student name:** Teacher can set a student name remotely
- **Attendance:** Save the attendance list as a text file
- **Device information:** Display the student device information such as battery state, IP, hardware ID and more
- **Remote settings:** Remotely set, configure and force all student-side settings centrally
- **Disconnect/Lock-in students:** Disconnect unwanted students from the classroom and disable classroom changing on student side.

Kiosk Mode Management

- **Create policies:** Create unlimited device policies
- **Apply policies:** Apply different device policies centrally, on the fly
- **Set device background:** Set the background image according to the different policies and force portrait, landscape and stretch mode
- **App policy:** Show only selected apps, hiding and locking the rest of the apps
- **Disable environment:** Select what Android interface environment will be available for students (such as notification bar etc.)
- **Disable USB usage:** Lock the usage of external USB drive or storage
- **Disable app installations:** Disable the ability to install new apps using app installer or Google Play

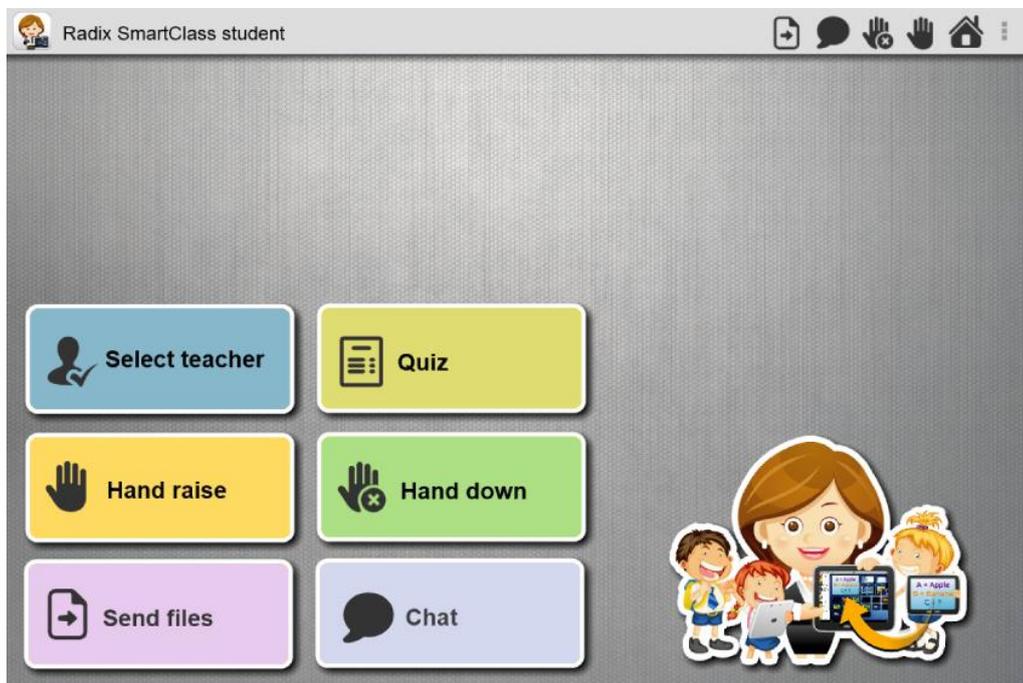
Assessment:

Integrating with existing classroom technologies and keeping a finger on the classroom pulse by checking what has been understood and what stage of learning the students are at. These functions also engage the class by changing the pace or style of learning to keep things interesting, adding another facility to the teacher's toolbox

- Run a pop-up quiz
- Run a survey
- Run an exam
- Get instant results
- Get result statistics
- Export results and statistics

Student functionality

- **Hand raise:** Students can electronically raise a hand for attention.
- **Respond to Exam:** Answer a complete multi question exam, navigate between questions and submit it to the teacher when done
- **Respond to pop quiz:** Respond to a pop quiz or a yes/no, agree, disagree
- **Set your name:** Student can be granted the rights to set his name
- **Initiate Chat:** Start chatting with the teacher
- **Electronic white board:** Collaborate with the teacher and other students on a shared electronic whiteboard
- **File submission:** Student submit file to the teacher
- **Classroom selector:** Student can select the class to connect to



SmartClass Technology

- **Screen Sharing:** Featuring the award winning Radix SapphireCast engine, allowing state of the art screen sharing technology with very high quality, low latency and outstanding performance One-to-One and One-to-Many screen sharing capabilities. Radix SapphireCast engine is highly configurable, allowing a perfect fit to different environments such as changing WiFi performance, tablet strength, number of devices on same network and so on. Configuration of number of frames per second, frame compression and quality, bitrate, latency and more, allows SapphireCast to deliver a wonderful experience to teachers and students even on different network environments.
- **Peer-to-peer:** Simply connecting to the Wi-Fi to work without requiring any extra hardware, server or software. The tablets themselves become the matrix of the classroom, with no barrier between the classroom technology and the students. This creates a very reliable, convenient and cost effective solution for schools.
- **Unified interface:** All teacher functions are operated from a single very easy-to-use interface. Teachers don't have to toggle between different applications to get everything done, whether monitoring, collaborative whiteboard work, file distribution, locking internet or tablets, running quizzes and more. This not only makes life simpler for teachers but also saves precious class time.
- **LMS plug-in and SDK:** Plug-in with the schools Learning Management System (LMS). Develop your own plugin or interface to SmartClass using the fully featured SDK (Software Developer Kit), allowing comprehensive integration with any 3rd party platform. This is extremely important for project leaders and decision makers, knowing that the SmartClass platform can be extended and enhanced by 3rd party developers.
- **Easy logistics:** Install teacher and student app on the same tablet for easy volume projects
- **Multi-platform:** Supporting Windows, Android and iOS in the same classroom
- **Multi-lingual:** Interface supporting the following languages: English, Spanish, French, Italian, Greek, Thai, Chinese Simplified and traditional, Japanese, Korean, Portuguese, Hebrew, Russian, Ukrainian, Vietnamese, Turkish, Albanian and more... New language can be added in less than 24 hours.