



Classroom Management Tools for Enhanced Learning

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Improving academic achievement has been a long-standing goal of educators across the world. One of the key ways to accelerate student performance is by enhancing the learning experience. A considerable amount of research has been dedicated to understanding how to achieve this goal over the past few decades. One of the most influential research studies is the Seven Principles of Effective Teaching (originally Seven Principles for Good Practice) developed by Arthur Chickering and Zelda Gamson in 1986.

This summary of five decades of educational findings defines the activities that are most likely to improve learning outcomes. These principles have been used frequently as a guideline for aligning effective pedagogy, both technology and non-technology based, with desired student learning outcomes. This paper uses these principles as the foundation of analysis regarding the Faronics Insight components that contribute to enhanced learning. According to Chickering and Gamson, the Seven Principles of Effective Teaching embodies the following characteristics:

- Encourages Student-Faculty Contact
- Encourages Cooperation Among Students
- Encourages Active Learning
- Gives Prompt Feedback
- Emphasizes Time on Task
- Communicates High Expectations
- Respects Diverse Talents & Ways of Knowing

The infusion of learning technologies into 21st century classrooms is only the first step in the process to transform traditional teaching methods into a modern approach closely aligned with the way today's digital-savvy students expect and want to learn. Subsequent steps include securing classroom management tools and strategies that enable teachers to effectively integrate instructional technologies into daily practice and providing professional development for teachers on instructional technologies, 21st century classroom management tools/strategies, along with new teaching paradigms. This white paper outlines the role of Faronics Insight in supporting enhanced learning through the implementation of specific features within this classroom management system.

Engagement

Engagement within the learning environment generally refers to the relationship between the learner and the content or topic being pursued. While the highest levels of engagement are seen when the learner is passionate about the topic, significant levels of engagement can be achieved through a variety strategies that actively involve the learner in activities and environments that make learning both interesting and challenging. Engagement with content leads to higher levels of learning.

Active learning is generally defined as any instructional method that engages students in the learning process. Active learning requires students to do meaningful learning activities and think about what they are doing. The core elements of active learning are student activity and engagement in the learning process. Adopting instructional practices that engage students in the learning process is the defining feature of active learning. The importance of student engagement is widely accepted and there is considerable evidence to support the effectiveness of student engagement on a broad range of learning outcomes.

Active learning and thus engagement is encouraged by giving students choices and encouragement to pursue projects that interest them as integrated components of their assignments, providing students who are ready for more challenge with opportunities to tackle independent research projects, and understanding students' learning styles and guiding them with opportunities that build on their strengths. On-going communication and teacher feedback support engagement by maintaining momentum of student excitement and exploration. Providing targeted resources to reduce frustration, especially with respect to web content and web searching, also helps to maintain momentum and engagement.

The Faronics Insight feature set closely aligns with the following Seven Principles of Effective Teaching in the area of engagement:

- Encourages Student-Faculty Contact
- Gives Prompt Feedback
- Encourages Active Learning
- Emphasizes Time on Task

Many of the Faronics Insight tools that enable differentiated instruction in a similar fashion support engaged learning. The communication channels available allow the teacher to determine and build upon individual student interests and passions, to encourage deeper thinking and investigation, and to offer suggestions for further research or independent projects. The student voting and testing features help the teacher to guide the students towards high levels of learning by challenging them with high expectation, but not frustrating them. The Faronics Insight console, along with the web control and limiting features, provides the teacher with the ability to keep the students on task and focused on their topic by limiting distractions and access to unnecessary or inappropriate resources. Together this collection of tools supports student engagement through thought provoking communications, targeted instruction, and focused learning.

Enhanced Learning

Enhanced Learning requires an environment that is engaging, interactive, and ensures that students are focused on the learning tasks at hand.

Interaction

Previously, engagement was defined as the relationship between the learner and the content. In a parallel manner, interaction is defined as the relationship between the learner and other learners (including the teacher, mentors, and subject matter experts) within the learning environment. While these relationships are similar, they are also distinct. Students can be engaged in and passionate about the learning process, but explore and investigate on their own if desired. Encouraging quality interactions with peers, teachers, and experts in the field bring a higher level of thinking, reflection, and introspection to the learning process. Active learning is not necessarily interactive unless designed intentionally to encourage dialog and communication.

Research about the science of learning indicates that active learning is one of the most important and essential components of the learning process. In *How People Learn*, John Bransford and colleagues persuasively present that active, rather than passive, learners are better able to understand complex material and can more effectively transfer information and concepts learned in one setting to the process of solving problems encountered in another context. When students are actively engaged in their learning process and they are required to apply what they have learned, they retain that knowledge.

Meyers and Jones identify the elements of active learning as talking and listening, writing, reading, and reflecting. Research shows greater learning when students engage in active learning. A wide variety of 21st century tools supports interactive learning and makes communication beyond the school boundaries safe, timely, and efficient. Using wikis, blogs, texting, and chatting all can help build collaboration and communication skills.

The Faronics Insight feature set closely aligns with the following Seven Principals of Effective Teaching in the area of interaction:

- Encourages Active Learning
- Encourages Student-Faculty Contact
- Encourages Cooperation Among Students

Faronics Insight provides multiple strategies for the teacher to create opportunities for rich and diverse interactions. Accessing the show teacher and show student screens allows for discussion and dialog with every student being able to clearly see and read the passage or screen being featured. The student question and chat features encourage student-to-teacher and student-to-student conversations. Students, as well as teachers, can use the voting and testing capacity to collect information or opinions within their peer group. Creating a 21st century learning environment that is interactive, yet focused, requires the types of tools included in the Faronics Insight collection.

Time on Task

Educators have known for more than a century that being present at school and, by extension, engaging in school activities, are directly related to achievement and performance. Time on task, or time spent engaged in learning, is a significant predictor of academic achievement. Though time on task does not explain the full picture of student achievement, studies on the relationship between achievement and time on task are generally positive and have been documented for decades.

Increasing time on task can be achieved through a variety of strategies that can be both technology and non-technology dependent:

- creating materials and processes that attract students to spend more time in their studies (e.g., integrating Web 2.0 tools in to assignments, providing opportunities for students to pursue personal interests while achieving content objectives)
- reducing wasted time (e.g., ineffective online searches, inappropriate web surfing)
- helping communicate to students how much time and energy is expected with respect to investing in their work (e.g., providing immediate feedback and encouragement, helping to set realistic goals and timelines)

Implementing strategies and tools that target time on task, allow teachers to increase the precision with which they teach, take into account what students know, what they need to know, and focus their time and efforts on closing the gap between the two.

The Faronics Insight feature set closely aligns with the following Seven Principles of Effective Teaching in the area of time on task:

- Emphasizes Time on Task
- Encourages Gives Prompt Feedback
- Communicates High Expectations

Faronics Insight real-time assessments allow the teacher to quickly define the learning path for individual students, reduce time spent on teaching skills and concepts that have already been mastered, and provide immediate feedback and reinforcement, resulting in a more efficient use of classroom learning time. Likewise, when the student knows what is expected and is aware that the teacher can track what they are doing at any point in time, the likelihood that they will stay on task is significantly increased. Faronics Insight screen, keystroke, and web monitoring, along with web and application limiting give the teacher the necessary tools to track multiple students in an efficient, effective, and unobtrusive manner. Additionally, the security and anti-tampering controls remove both temptations and distractions within the electronic classroom. As documented in the research, Faronics Insight features that support time on task in the 21st century classroom are likely to result in increased student achievement.

Summary

An effective 21st century teacher needs appropriate management tools and strategies to ensure enhanced learning. Faronics Insight is a tool with a wide variety of features that helps the effective teacher to become an equally effective teacher in the technology-rich classroom. It is unrealistic to expect that teachers can simply integrate technology resources into the curriculum in meaningful ways that enrich rather than distract, encourage engagement and interaction, and maintain time on task, without the types of classroom management tools and strategies offered by Faronics Insight.

Likewise, just having the Faronics Insight components does not guarantee Enhanced Learning. The professional development required for educators to use the Faronics Insight components well to implement new teaching paradigms and strategies is a critical success factor in achieving the outcomes desired of 21st century learners.

The following matrix aligns each of the key Faronics Insight features with the Enhanced Learning components described in this white paper.

Faronics Insight Key Features	Engagement	Interaction	Time on Task
Quick, Easy Access			
Button Bar			
Shortcut Menu			
Monitor Students			
Thumbnail View			X
Details View			X
Keystroke Monitoring			
Screen Snapshot			
Internet History			
Running Programs			X
Remove Distractions			
Blank Student Screens			X
Web Limiting			X
Application Limiting			X
Print Limiting			
USB Drive Limiting			
Mute Sound			
Teach		X	
Show Teacher Screen	X	X	
Show Student Screen			
Remote Control			
Co-browse		X	
Choose Random Student		X	
Communicate			
Send a Message			
Chat	X		
Answer Student Question		X	
Assess Student Progress			
Testing	X	X	
Voting	X	X	
Save Time			
Send/Collect Files			
Power On, Logoff, Restart, Power Off			
Multi-remote Control			
1:1 Support			
Wireless			
Thin Client			
Class Lists			

Faronics Insight Key Features	Engagement	Interaction	Time on Task
Battery Monitoring			
Security			
Anti-tampering Controls			X
Active Directory Secure Mode			
Secure Mode			
Security Monitor			X