

Title:

Real-time Assessment in Instruction using Instructional
Technology

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PROGRAM DESCRIPTION

Students are motivated to participate and learn by using an interactive learning system named the Classroom Performance System (CPS). CPS was developed by eInstruction to provide instant feedback for classroom teachers. CPS will provide real-time feedback for an instructor similar to how the audience is polled in the “Who Wants to be a Millionaire” TV show. An instructor can also use CPS to test students at the end of a unit as a graded exercise.

PRESENTATION ABSTRACT



CPS (Classroom Performance System) is cutting edge technology that allows me to assess student understanding of the concepts being taught while I am teaching the concepts. This hardware and software combination features the ability to ask students questions and immediately collect and analyze their answers. CPS uses student keypads that look like small remote controls. This is similar to the way the audience is polled in ABC’s popular “Who Wants to Be a Millionaire” show. Results of each question are displayed after all answers have been entered. This helps students learn in their own way – interactively. It also is a motivation tool that allows all students to participate without concern over answering a question incorrectly. Using the CPS system

does eliminate choral responses to many questions during a lecture. Research has shown that the system does improve student performance and test scores.

CPS provides real time feedback for me to check student understanding during a large group instruction. This feedback allows me to change and modify instruction based on the understanding and needs of my students revealed through my on-screen questioning. It also clues my students into what information they missed and will need to learn or review. The last benefit of using this system is to make the lecture format more interactive, thereby increasing student learning and engagement. Many students have told me that they think learning this way is neat and improves their grades.

I use CPS in tandem with Microsoft PowerPoint to display notes. I also use specific application software during demonstration. I can easily switch from demonstration to notes to testing understanding with CPS and back again.



CPS (Classroom Performance System) ends assessment scoring nightmare.



Perry states that he won the lottery, because he no longer has to grade tests. The students have fun taking their test using CPS and enjoy the instant feedback both on the screen and in knowing their final grade on the assignment. He states that he has barely scratched the surface of how CPS might be used. However, if he never uses it for more than testing, he believes it is great and a true time saver that improves assessment and student feedback.
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The End User

Michael Perry, 43, is a full-time business education teacher at Chapel Hill High School in Douglasville, Georgia in suburban Atlanta. He also teaches business at the Coles College of Business at Kennesaw State University. In 1999, Perry received one of three state-wide Honor Teacher awards in the middle-school category sponsored by the Atlanta Journal Constitution newspaper. Later that year, he was recognized as Innovative Teacher of the Year by the Phi Delta Kappa Education Fraternity of the State University of West Georgia. In 2001, he was again recognized by Phi Delta Kappa Education Fraternity of the State University of West Georgia as their Teacher of the Year.

The Challenge

● An award-winning teacher, Michael Perry teaches business education in high school and business at the University level.

● He was looking for a better method of scoring tests and providing feedback to students on a timely basis.

Improve response and feedback for students while reducing time spent correcting and reporting student performance. Accessing student performance is critical for an instructor to know if the class learned the information or not. Most assessment is done at the end of a unit and not timely because of time required to score the assessment.

The Solution

● Perry saw CPS by eInstruction demonstrated at a computer conference. He was impressed at the system's ability to solve the problem.

Technology has evolved to become an integral tool for the classroom teacher in improving instruction, communication and assessment. The search was for an efficient means of improving assessment and taming the chore of hand scoring student assessments. CPS is an interactive student response system that facilitates immediate feedback from the entire class.

Instruction is improved by using an efficient method of gauging student understanding of the lesson being delivered. This allows the teacher to make changes to the lesson on the fly and capitalize on the "teachable moment."

Instructional Impact

With CPS, students are more engaged, focused, and interactive in class when the teacher uses CPS during instruction. Additionally, CPS helps streamline much of the grading burden placed on teachers by grading all objective homework, quizzes and tests.

● CPS and CPS online continue to make advancements that help streamline assessment for teachers and provide real-time feedback for students.

CPS Online, a web-based learning environment, allows teachers to post assignments, tests, hot links, messages, syllabi, etc. online. eInstruction has integrated CPS online and CPS in the following manner: data collected in class with CPS can easily be uploaded to the accompanying CPS Online. This provides students and parents near real-time feedback on what took place in class that day. Students and parents can log on and see what happened in class, finding out where they succeeded and where they struggled. This connection is extremely compelling and facilitates active participation in class and online while encouraging parents to actively participate in their students' lives.

CPS online allows parents and students to see results of their tests online. This means that more accurate information is available to your "customers" (parents and students). It is more meaningful for a parent or student to see the graded test or assessment rather than just a numerical score.

Student Impact

● Students are more engaged, focused, and interactive in class when the teacher uses CPS during instruction.

Students receive timely feedback on their comprehension of class material by using CPS with instruction. CPS breaks up the traditional lecture by allowing the teacher to ask questions and get class feedback that can be stored and analyzed. When students do not understand a concept or lesson, the teacher knows this fact immediately and can change the approach to the topic. This eliminates the lag time from teaching to assessment to scoring the assessment that resulted in lessons being re-taught several days later.

In one mode, students see results of their test question by question as the test is scored while they are taking it. This eliminates anxiety over how well they did on the test and informs them of the areas in which they need more practice or study time.

Teacher Impact

● CPS breaks up the traditional lecture by allowing the teacher to ask questions and get class feedback that can be stored and analyzed.

Perry had often been answered the question from students about what would he do if he won the lottery. His reply was that he would never grade another test in his life. He went on to say that he hates grading tests. His desire would be to keep teaching, but eliminate test grading and other routine time consuming tasks.

Perry states that he won the lottery, because he no longer has to grade tests. The students have fun taking their test using CPS and enjoy the instant feedback both on the screen and in knowing their final grade on the assignment. He states that he has barely scratched the surface of how CPS might be used. However, if he never uses it for more than testing, he believes it is great and a true time saver that improves assessment and student feedback.

● Perry hates grading tests-- CPS is great and a true time saver that improves assessment and student feedback.

On a recent keyboarding test, there was a question on why studying keyboarding is important because (A) it is a vital business skill (B) taught by a dynamic teacher, Mr. Perry (C) can improve your writing (D) All of the above. One student challenged correct answer D. She wanted argue (playfully) that B was not true. He quickly responded with a question -- Name another teacher who has a neat system like this (CPS) and that has a web site for you. Of course, there was no reply except her conceding the point. So you get some other benefits from having "cool" stuff that you use in your teaching.

Conclusions

CPS and CPS online are an expanding concept that is breaking new ground to improve classroom instruction through communication and a groundbreaking concept. CPS has resulted in the following impact on the student: increased interactivity, better grades, more informed student and parent, and a less-burdened teacher.

