

Student Response Devices

**Increasing Student
Engagement
and
Making Data-Driven
Decisions**

A Little Bit About Me:

Classroom Teacher (grades 2 and 5) - 5 Years

Elementary Instructional Technology Support
Coach - 2 years

Focus on Curriculum and Assessment

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**Solanco School District
Elementary Online Instructor
Elementary Instructional Technology Support**

Have you used student response devices in the past?



Promethean Products



CPS Products

iRespond Products



And many more...



Have you used student response devices in the past?



Yes



No



Have you used student response devices as a student?



Yes



No



Have you used student response devices as a teacher?



Yes



No

Why use student response devices? What does the research say?

- As early as 1999, the National Research Council was citing "classroom response system technology one of the **most promising innovations for transforming classrooms to be more learner-, knowledge-, assessment-, and community-centered.**"

Why use student response devices? What does the research say?

- In a study on the effects of student response systems, conducted by Hall in 2005, students referred to an **increased level of engagement**. Students' comments indicated that student response systems were a **powerful motivator for class preparation and aided in understanding**. Students indicated that questions inserted into the lessons periodically, **encouraged engagement throughout**.

Why use student response devices? What does the research say?

In a comparison of methods (conducted in 2007 by Stowell and Nelson), "**formal participation was highest in the clicker group**, followed by the response card group, both of which were significantly higher than the hand-raising groups."

How are student response devices being used at Solanco?

- ActivExpressions by Promethean, class sets of 32 devices
- 12 third grade classrooms implemented during 2010-2011 school year
- 21 fourth and fifth grade classrooms will be implemented in January 2012
- 4 sixth grade Language Arts classrooms will be implemented in January 2012

See them in action:

What do the teachers think?

I think that the clickers have had an impact on my classroom because it is something that the **students look forward to using**. They are a great way to **check for individual understanding**, and even **whole group understanding**. Also, if I teach a topic using a flipchart and tell the students they will be **using their clickers at the end of the flipchart**, they are muchhhh more involved in the lesson. 😊

-S.G., 3rd Grade Teacher

I LOVE having all the student responses on a spreadsheet by question! I can use this information to help gather data for follow-up lessons. I use the ActivExpression devices for PSSA prep in math and reading, so some of what the students are working on are skills that will be taught later on in the year. If I can **preteach** them in this way, I can adapt my lessons on those topics when it is time to teach them. **I'm hoping to have increased scores through the use of these devices.**

- R.C., 3rd Grade Teacher

I find the **biggest impact** being that **all students have to answer all questions**. Also I can find out if we can **move on** if everyone understands a concept. They also **increase attention** of the students. Saving the **data** allows for **small group reteaching**.

- M.K., 3rd Grade Teacher

We (the students and I) love the Active Expression devices for several reasons.

1. The device is **fun** to use on any activity. It creates **high interest** for the students. Example-we were solving addition and subtraction problems over and over and over to where the task became boring. The next day we did the exact same practice but the students solved the addition and subtraction problem on scratch paper and then sent their answer through text using the device. All of a sudden the enthusiasm for solving addition and subtraction problems was very high.
2. It is great to use as a **review** before giving a unit test.
3. **It forces every child to be a part of the lesson and give a response.**
4. It provides **immediate feedback** to what has been taught.

-C.B., 3rd Grade Teacher

**What do the
students think?**

How can student response devices increase student engagement?

How can student response devices support data-driven decisions?

Subtraction with Regrouping Flipchart

Subtraction with
Regrouping Results

Synonyms Flipchart

Synonyms Results

Types of Questions and Responses

Student
Introduction
Lesson

Questions



References:

- Hall, R. H., Collier, H. L., Thomas, M. L., & Hilgers, M. G. (2005). A student response system for increasing engagement, motivation, and learning in high enrollment lectures. *Proceedings of the Eleventh Americas Conference on Information Systems*.
- National Research Council. (1999). How people learn: Brain, mind, experience and school. Washington, DC: National Academy Press.
- Stowell, J. R., & Nelson, J. M. (2007). Benefits of electronic audience response systems on student participation, learning, and emotion. *Teaching of Psychology*, Vol. 34 (No. 4), 253-258.

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