

# HATTIE + CANVAS LMS

## EVIDENCE-BASED WAYS TO IMPROVE STUDENT ACHIEVEMENT WITH CANVAS LMS

### YOU KNOW JOHN HATTIE ...

He's the education researcher and professor who measured the effects of teaching and learning approaches on student achievement during a typical school year. His groundbreaking research was based on an analysis of 50,000 educational studies involving 80 million students.

- Published in 2009, Hattie's "Visible Learning" ranked 138 activities according to the size of their effect on learning outcomes.
- His 2012 follow up, "Visible Learning for Teachers," ranked 150 activities and offered practical ways to apply his research in the classroom.

**AS AN EDUCATOR, YOU CAN DO MORE TO MAXIMIZE STUDENT LEARNING OVER A NINE-MONTH PERIOD BY FOCUSING ON ACTIVITIES IN HATTIE'S ZONE OF DESIRED EFFECTS.**

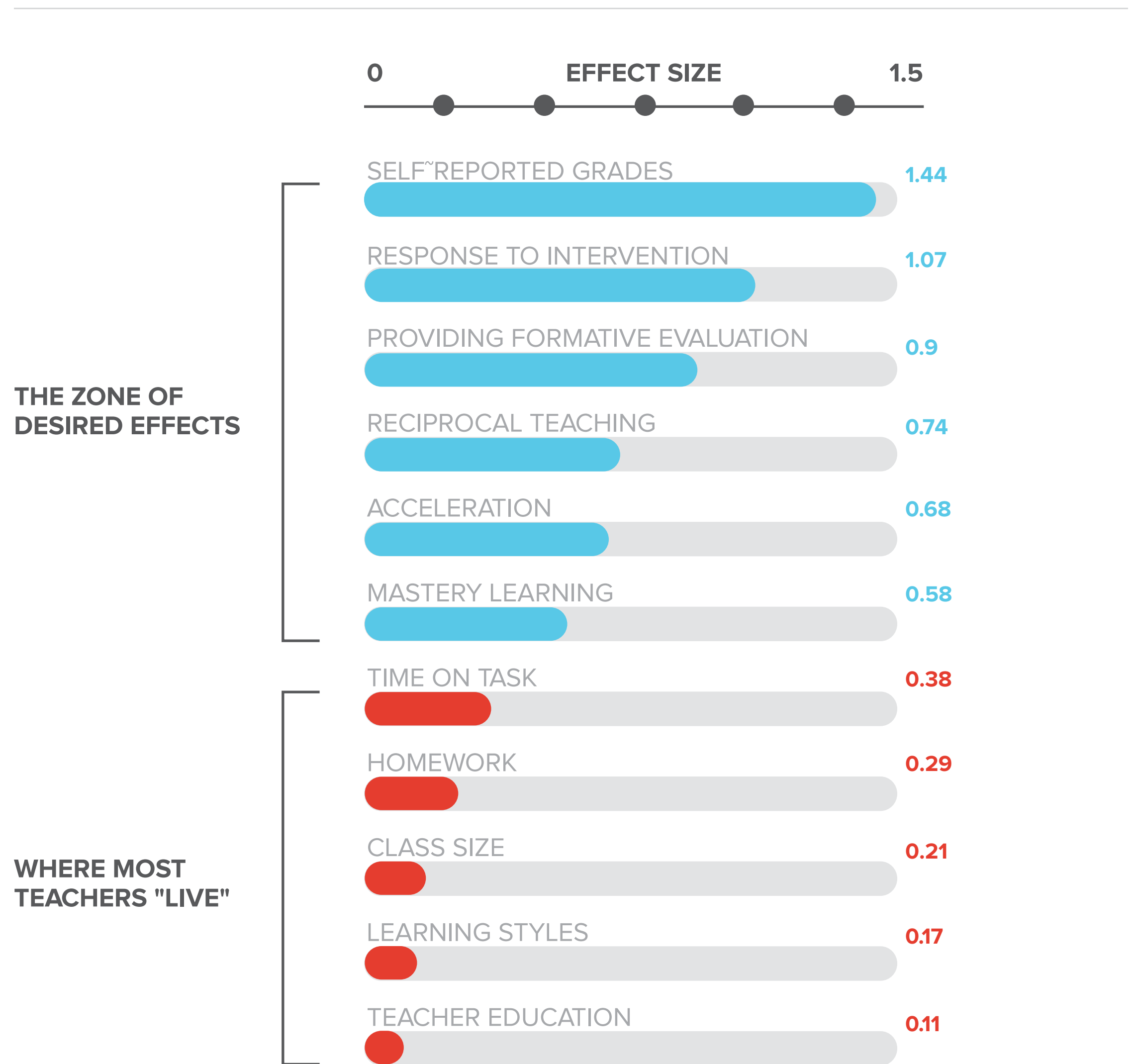


"Visible Learning Meta-Study." *Visible Learning*. Accessed January 30, 2017. <https://visible-learning.org/2009/02/visible-learning-meta-study/>.

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From the 2011 Hattie Ranking:

### MOVE TOWARD THE ZONE OF DESIRED EFFECTS



For teachers who use Canvas LMS, applying Hattie's evidence-based research to improve student achievement has never been easier.

# CANVAS LMS UNIQUELY SUPPORTS THESE SIX LEARNING ACTIVITIES IN THE ZONE OF DESIRED EFFECTS

## 1 SELF-REPORTED GRADES

Hattie observed that students are able to predict their own performance with the most accuracy. But accuracy isn't the point—it's more about setting expectations. When students perform better than expected, they gain confidence and achieve more.

### THE CANVAS WAY: WHAT-IF GRADES

With this feature, students can calculate their total class grade by entering hypothetical grades for individual assignments. Then, they can monitor their progress, and, with some encouragement, exceed their own expectations for achievement.

## 4 RECIPROCAL TEACHING

Following this model, teachers guide students in summarizing, generating questions, clarifying, and making predictions about materials presented or read. Students then assume the role of teacher by leading discussions in small groups.

### THE CANVAS WAY: COLLABORATIONS, DISCUSSIONS, GROUPS, PAGES

Teachers can enrich the learning experience in Canvas LMS by giving students opportunities to lead. For example, students can use Collaborations and Groups to share and work together synchronously in documents or presentations. They can also use the Discussions feature to create new discussion topics. And if enabled by the teacher, students can use Pages to create or edit learning materials for the entire class.

## 2 RESPONSE TO INTERVENTION

This simple, yet highly-effective approach is based on providing interventions for struggling students by presenting the same subject matter in a different way. Without technology, this would require reteaching materials to the entire class (even to students who've shown mastery) or finding time to provide remediation for students individually.

### THE CANVAS WAY: MASTERYPATHS

By using MasteryPaths, teachers can determine which students have mastered a topic or skill and which need extra help. How students perform on an initial assignment determines their customized learning path, enabling teachers to identify and reach struggling students by presenting materials in new ways.

## 5 ACCELERATION

It's a simple idea: Allowing advanced students to work ahead rather than being bored in class helps them learn and achieve more during the school year.

### THE CANVAS WAY: MODULES, AVAILABILITY DATES

Modules enable teachers to organize course content by weeks, units, or other organizational structures. They create a linear flow, requiring students to review materials or complete assignments in a predetermined order. Additionally, with Availability Dates, teachers can create specific date ranges to open or restrict access to content.

## 3 PROVIDING FORMATIVE EVALUATION

This refers to any activity used to assess student knowledge before or during instruction that can guide the learning process. In other words, it's about helping teachers decide what to do next.

### THE CANVAS WAY: ASSIGNMENTS, DISCUSSIONS, QUIZZES, LTI TOOLS

In addition to relying on the powerful online assessment features available in Canvas LMS, teachers have the flexibility to use any number of integrated LTI tools to assess and guide student learning.

## 6 MASTERY LEARNING

By identifying students' knowledge gaps with pre- and post-assessments, then targeting those gaps, teachers can provide remediation or advancement based on the individual needs of each student.

### THE CANVAS WAY: MODULES, MASTERYPATHS

In addition to Modules, which allow for multiple attempts, MasteryPaths enables teachers to create customized learning paths with differentiated assignments designed to help students fill knowledge gaps according to their individual needs.



To learn more about all the ways that Canvas can help you apply validated research to improve student achievement, visit

[WWW.CANVASLMS.COM/IMPROVEMENT](http://WWW.CANVASLMS.COM/IMPROVEMENT)

# HATTIE + CANVAS PRACTICE

## EVIDENCE-BASED WAYS OF ACCELERATING TEACHER DEVELOPMENT, AND THUS STUDENT ACHIEVEMENT, WITH CANVAS PRACTICE

### HATTIE APPLIES TO ALL LEARNERS...

Educators are always looking for evidence-based ways to improve student achievement. But teachers are learners, too! Thus, the research showing quality of teaching to be the single most important in-school factor contributing to student achievement certainly applies to teacher development.

Seeking evidence-based ways to create bigger impacts on professional development is critical. Here we lay out some of the evidence-based ways to improve student achievement through professional learning with Hattie and Canvas Practice.

You can do more to impact student achievement through providing effective professional development by focusing on activities in Hattie's Zone of Desired Effects.

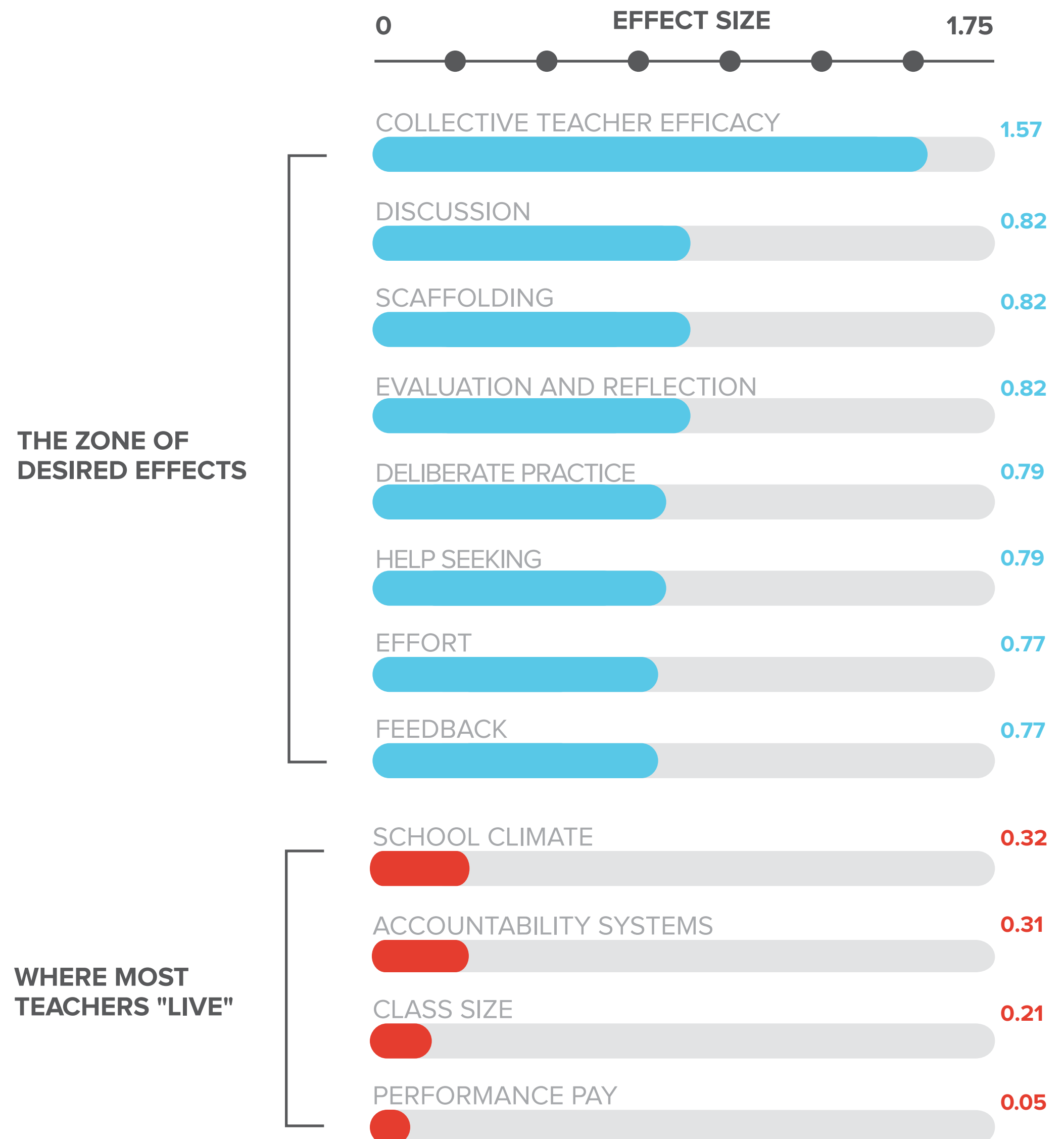


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From the 2011 Hattie Ranking:

### MOVE TOWARD THE ZONE OF DESIRED EFFECTS



For leaders in education who are driven and responsible to help teachers grow and succeed,

# HERE'S HOW CANVAS PRACTICE SUPPORTS THESE EIGHT LEARNING ACTIVITIES IN THE ZONE OF DESIRED EFFECTS

## THE CANVAS PRACTICE WAY: FREQUENT AND DELIBERATE PRACTICE

Canvas Practice offers learners an environment with lots of opportunities to practice skills deliberately and being guided by clear goals and specific prompts.

### DELIBERATE PRACTICE 0.79

It's not about time spent in practice, but particular time investment in practice - purposeful, mindfull, and systematic. Simply spending more time on mindless practice doesn't necessarily leads to improvement unless there's a deliberate focus and approach.

### EFFORT 0.77

It's not rocket science: learning takes time, action, and efforts. To learn something, learners need to take action.

## THE CANVAS PRACTICE WAY: TEACHER INTERACTION

With Canvas Practice, learners can observe each other and give and receive frequent, ongoing targeted feedback. This facilitates and encourages the interaction between teachers about their craft.

### SEEK HELP FROM PEERS 0.72

This approach is simple, straightforward, yet highly effective. In the process of learning, seeking help from peers provides a source of insight and encouragement from those understanding the unique classroom settings, furthering deliberate collaboration centered around the goal of teacher development.

### DISCUSSION 0.82

Through discussion, instructors help learners to activate prior knowledge, explore new topics, learn from other teachers, and demonstrate learning.

## THE CANVAS PRACTICE WAY: MENTORS

Canvas Practice lets learners receive targeted and timely individualized feedback from experts and peers. And more importantly, it encourages collaboration and offers an environment to let teachers collectively take action, learn, and share.

### FEEDBACK 0.70

Feedback helps learners understand what they do know, what they don't know, where they go, and how they can improve. The more specific, frequent, and rich the feedback can be, the more helpful they are to learners.

### SCAFFOLDING 0.82

With a little bit of help and guidance, instructors can greatly improve the learning experience for students (in this case, teachers are the students). It's the idea that supporting students during their learning process, anticipating where they may get stuck, and responding with guidance, accelerates learning.

## THE CANVAS PRACTICE WAY: OBSERVATION OF SELF

Learners self-assess and reflect on their video compared to modeled best practice. Canvas Practice lets learners (teachers in this case) observe and assess their own teaching and reflect on how to improve.

### COLLECTIVE TEACHER EFFICACY 1.57

Collective teacher efficacy has the greatest impact on student achievement more than any other factor. It's about teachers collectively believing in their own ability to help their students succeed, including those who are disengaged and/or disadvantaged.

### EVALUATING AND REFLECTION 0.75

Gathering data is one thing. Using accurate data, from observation, to inform teachers if what they are doing works can accelerate development by allowing teachers to do more of what is working, and improve upon the less effective areas.



To learn more about all the ways that Canvas Practice can help you apply validated research to improve student achievement, visit...

<https://www.instructure.com/canvas/k-12/platform/products/practice>