

Education Week

Students Can Learn From Mistakes . . . If We Let Them

By Peter DeWitt on October 25, 2015



We've all done it. Ask a question...wait for our students to answer...and get nothing. In an effort to bring about some dialogue with our classes, we ask one particular student a question. The student struggles to answer, so we give them the answer and move on. Within that moment that we decided to give the answer, we sent some serious messages to our students.

- **Message #1** - If you remain quiet when I ask you a question, I will ultimately give you the answer.
- **Message #2** - Struggling to give an answer is not ok, which is why I provide the answer.
- **Message #3** - Participation in your own learning is voluntary.
- **Message #4** - When learning is hard, shut down because an adult will take care of it, and you don't have any responsibility in the situation.

As adults, we talk a lot about learning from failure and making sure we have the growth mindset. Unfortunately, the growth mindset doesn't work ([Why the Growth Mindset Doesn't Work](#)) as well as it should because we treat our students in a fixed way. Error provides the opportunity for growth, but we treat students in a fixed way by providing them with an answer so they never really have the opportunity to learn to the depth that they could. Remember the Chinese proverb...

"Tell me, I'll forget.

Show me, I'll remember.

Involve me, I'll understand."

Sometimes we're good at reciting the proverb but not so good at making it happen.

John Hattie, someone I work with as a Visible Learning Trainer, says that 40% to 50% of the time our students make errors, we correct them. They're never given the opportunity to struggle because we give them the answer before it gets too hard.

As a former first grade teacher, I understand the pain we feel when students struggle. No one wants to see students at that age struggle too much, which is why the Goldilock's Principle is so important. We need to make sure we ask questions that aren't too hard or too easy, but spend our time asking questions that are just right.

That may look different for each student and each grade level.

The Power of Errors

Through his decades of research, Hattie found that an effect size of .40 (also known as Hinge Point) was where students achieved at least one year's progress after one year's input. Out of the 150 influences on learning that Hattie's research brought to light, he found many that have a positive effect on learning; some that do not provide much of a bang for our buck, and others that have a negative effect on learning.

One area that has a positive effect is when "*Errors and trust are welcomed as opportunities to learn*," which has an effect size of .72. At an ILASCD event in Woodbridge, Illinois last week Hattie asked, "*How do we teach kids that effort really makes a difference?*" Jim Knight, someone I work with as an instructional coaching trainer, often says, "*Effort is where the action is.*"

It's a balance really, which is why the Goldilock's Principle is so important. Compounding the complication has to do with the kind of questions we are asking in the classroom which should inspire engagement and not extinguish it. Are we asking too many close-ended questions? Do we need to ask more open-ended questions?

The other thing to think about is what do we do when students can't, or choose not to, answer our questions? Some ideas, which many teachers have used for a long time and I did not create, are the following:

- **Think, Pair, Share** - get students to work in groups of 2 or 3. Give them a question and time for dialogue. This, of course, takes modeling on the front end so they know how to engage in dialogue. Through dialogue with their peers they will feel safe (in the right classroom climate) and be less concerned about making an error. Additionally, if there is still an error, it is on the part of the pair or group and not on the individual student.
- **Get up, talk with someone in the class, share your answer** - This provides students with the opportunity to get up and talk with a classmate about the question.
- **Phone-a-Friend** - I got this from Jim Knight. If a student cannot answer the question after a bit of wait time, give them the opportunity to call on a friend in the classroom.
- **Popsicle Can** - Every student has to write their name on a popsicle stick. The teacher puts them in a can and shakes them before or after asking a question. All students sit up because they know they may be called upon, and then the teacher pulls a popsicle stick out of the can.
- **Provide wait time** - We don't like wait time. We have so much to get through, so we just want students to answer the questions. It becomes a case of being more about answering the question than whether all students are learning.

In the End

There are many other ways to build student engagement in the classroom. What we need to get away from is the adult in the classroom answering their own questions, and fostering an atmosphere where students can rely on each other and work in collaboration. As with anything, this requires balance because we want to make sure the student who doesn't want to answer questions actually takes the opportunity to do so.

As Hattie says learning is hard work and it offers us challenges. We know that as adults but want to prevent our students from seeing the challenge because it doesn't always feel good. We need to change our expectations to make sure that students understand they do have to take ownership over their own learning, and not giving them the answers sometimes may be the place to start.

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