Teachers, Are You Helping or Hurting?

Marina McLerran

When working with students, it is easy for teachers to feel accomplished because they reached the end of their lesson plan for the day. This achievement by itself, however, means nothing unless the students remember the lesson. In order to commit a new concept to memory, children must make a conscious effort to improve and be provided with opportunities to fail.

How Lasting Memories Are Made

In a recent study by the Baycrest Rotman Research Institute in Toronto, researchers determined that subjects of all ages were better able to retain information "by making near-miss mistakes" (Griffiths). It is necessary for the brain to first be challenged in order to create new connections and lasting memories. To encourage this type of learning, educators might allow more time for students to find the proper fingering for a note or give multiple chances to answer questions; teach them how to find the solution. Simply giving students the answers is an inefficient method of educating that results in apathetic students with poor critical thinking abilities.

Dr. Robert Duke of the University of Texas, in his recent publication in the *Music Educators Journal*, observes that directors "at times provide *more* assistance than is actually required and, in so doing, inadvertently limit learners' development over the long term." Educators who focus too intently on using their time efficiently, Professor Duke warns, may be too quick to provide answers to students. Although the lecture might be progressing at a fast pace, it is the responsibility of the director to ensure that students are mentally engaged and are therefore able to commit the material to memory; learning cannot be a passive activity. Dr. Duke states that "energy is required [to learn] because memory consolidation involves changes to the physical structure of the brain."

Making a Conscious Effort to Improve

Kayt Sukel from The DANA Foundation states that students "must be conscious of [their] mistakes to reap the benefits of improved performance." She references a study done by Hans Schroder of Michigan State University in 2012 that explored the amount of brain activity required for the completion of a simple task initially and then again when the instructions were reversed. The results showed that individuals under too much stress could not successfully complete the task; there must be a balance between the amount of energy that is used to identify the mistake and the energy required to continue towards the goal of the activity. In the classroom, therefore, educators should strive to create an environment where errors are an acceptable part of the learning process and not a cause for panic. Directors can facilitate this attitude by acknowledging their own mistakes and by responding to struggling students with the creed "we can mess up but we cannot quit."

About focusing on error-identification in the classroom, Professor Duke believes that it is imperative to the learning process "even though doing so requires more time;" it is the responsibility of the educator to be patient and encouraging, not to give the answers. More helpful to students, is the ability to name their own deficiency and develop a plan of action to remedy the issue. For example, are music students aware of their intonation? When a mistake is realized, do the students immediately ask for help or attempt a solution (or a few) on their own first? The ability (and courage) to analyze a situation and develop a plan of action is not only a desirable trait in students, but also in (future) employees.

Building Confidence

Sarah Neish from *Psychologies*, asserts that parents and educators most often "stop children from making mistakes to save them feeling distressed," but that this act denies them the opportunity to grow emotionally. Neish suggests that the "natural consequences" of said mistakes will leave enough of an impact without the need for additional explanation. An educator who employs this philosophy might allow a student to perform poorly at a solo contest in order to make the point that practice is necessary for success. Neish also advises that children who are made to feel ashamed of errors will eventually cease all efforts to improve; educators must find the

balance between positive and negative feedback. Dr. Evelyn Crone, professor of neurocognitive developmental psychology at Leiden University, encourages parents and teachers to be aware of the developmental characteristics of the age group in question; children younger than twelve will be impervious to negative feedback, while children over twelve will tend to dwell on it. Educators should reassure students that mistakes will be made, especially in live musical performances; it's just part of being a person.

Students who have been allowed to passively enter the classroom will push back, at times with anger, when directors refuse to provide answers immediately. Recently, I taught a middle school woodwind sectional over a particularly challenging pop tune and refused to count the rhythms for the students. This of course, frustrated several of the musicians, and I'm sure, made me a less popular band director. At the end of the rehearsal, though, I was approached by one of the flute players who thanked me for making them figure out their own music. She said that she hates it when teachers give them the answers right away because "it's like spoiling the end of a movie." Students might not enjoy the puzzle-solving process while they're in it, but they will appreciate the ability to decipher their own music in the long run. This confidence in their own abilities will also likely spill over into other aspects of the child's life; their approach to difficult homework, large presentations, and challenging social situations.

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Sources

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