



# MisEducated

## Correcting the Truth about Persistent Education Myths

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**E**ncouraging student learning is especially challenging in medical assisting education, where time is limited and stakes are high. Educators may rely on intuition or informal beliefs about how learning works, but decades of research show that many of these beliefs are inaccurate. When myths and misconceptions shape instruction, they can waste valuable time and resources—and even impede learning.<sup>1</sup>

### *Fact-Checking Fictions*

“I have observed how myths in education have emerged [and] been adopted and adapted by educators and students alike,” says Kimberly Scott, DBA, MPH, CMA (AAMA), a medical assisting educator at Keiser University in Fort Lauderdale, Florida. “Interestingly, some myths have evolved into common practice, while others developed from educators’ own experiences as students or are transferred by students from one course to another.”

“I think education myths persist because of tradition and habit,” says Melody Gibson, HHS, MHRD, CMA (AAMA), CPT (ASPT), associate dean at Gaston College in Dallas, North Carolina. “An educator might say, ‘It’s how I was taught, and I did fine,’ but then that becomes, ‘It’s how I teach.’”

“Medical education myths endure,” says Geoffrey Norman, PhD, professor emeritus of health research methods, evidence, and impact at McMaster University in Ontario, Canada. “Many, such as the idea that adjust-

ing for trainee learning styles enhances learning, are part of the core curriculum in postgraduate-level teacher training courses.”

Buy-in from fellow program directors and educators is necessary for curricula changes, but myths are difficult to dispel because people struggle to let go of incorrect information. In an era of information overload, in which sources vary widely in credibility, knowledge is acquired with ease but becomes difficult to question, revise, or replace once internalized.<sup>2</sup> Studies suggest that conceptual change is more likely when incorrect beliefs and accurate information are activated simultaneously in working memory.

### *Myth #1: Teach According to Learning Styles*

One myth that has endured is the idea that students learn better when instruction is tailored to their preferred learning style (e.g., visual, auditory, or kinesthetic). In fact, a review of 37 studies involving more than 15,000 educators from 18 countries found that 89% of educators believed in matching instruction to learning styles, and 95% of educator trainees endorse the practice.<sup>3</sup>

“The belief in learning styles persists because people have no qualms about dismissing scientific evidence by using a single vivid counterexample,” says Dr. Norman. “For example, no one has any difficulty declaring themselves as visual or verbal learners, so this version of learning style can find many firsthand testimonials to support its veracity. Unfortunately, self-reported visual [or] verbal learning has been shown to have no relation

to either direct measures of spatial and verbal ability or learning from visually or verbally oriented instructional materials.”

Indeed, studies show that learning styles are organized into loosely defined and often arbitrary categories. Learning preferences can shift depending on the content being taught and may change over time.<sup>4</sup> Although students may express preferences for certain styles, effective instruction is better achieved by actively engaging learners through different modalities and by linking new material to their existing knowledge base.<sup>4</sup> And engaging students with content in multiple forms fosters the ability to pay attention to content in different ways and requires integrating knowledge in new ways.

### *Myth #2: More Homework Equals Smarter Students*

“It’s a long-held belief that assigning large amounts of homework leads to increased understanding, discipline, and engagement, but that’s not necessarily the case,” says Scott. “Medical assistant students are often adults returning to school who have many other obligations, such as children, family caregiving duties, and jobs. Assigning too much homework can have the effect of overwhelming them and even cause them to drop out.”

Assigning too much homework can increase stress, reduce sleep, and allow less time for jobs, hobbies, and family time, all of which can affect overall well-being and academic performance. To encourage students, do not focus on the *quantity* of

homework; focus on the *quality* of the assignments. Students learn more and are more successful when the homework is engaging, challenging, and relevant to their lives.<sup>4</sup>

**Myth #3: Struggling Students Are Not Trying Hard Enough**

Research consistently shows that academic struggling is rarely a simple matter of a student “not trying hard enough.” Instead, academic struggles are typically the result of complex psychological, cognitive, and environmental factors that can make even high levels of effort ineffective.<sup>5</sup>

“Educators may assume low performance is tied to motivation, but that’s usually not the case. Rather, medical assisting students are often dealing with other barriers such as childcare, [lack of] confidence, prior learning gaps, or unclear instructions,” says Gibson.

Educators should shift from a deficit view of student effort to a skill-building approach using these suggestions<sup>6</sup>:

- **Scaffold instructions:** Break complex tasks into manageable steps and provide clear expectations and high-quality examples.
- **Foster connection:** Students are more likely to succeed when they feel connected to the program and their teachers.
- **Promote a growth mindset:** Reinforce effort-based praise rather than outcome-based praise to help students see mistakes as part of the learning process.
- **Provide emotional support:** Identify mental health risks and connect students with support sys-

Myth	Harmful Consequence	Solution
#1. Teach to Learning Styles	This leads to maladaptive study habits and avoidance of diverse subjects.	Use a variety of methods that actively engage learners and link new material to their existing knowledge base.
#2. More Homework = Smarter Students	Too much homework can create overworked, stressed-out students who have difficulty learning.	Prioritize the quality of homework. Tasks that are engaging, challenging, and relevant are more likely to promote academic success.
#3. Struggling Students Are Not Trying Hard Enough	Students give up.	<ul style="list-style-type: none"> <li>• Scaffold instructions.</li> <li>• Foster connection.</li> <li>• Promote a growth mindset.</li> <li>• Provide emotional support.</li> </ul>
#4. Students Will Be Disruptive	Educators are anxious and feel chronically underprepared.	Create lessons with activities, relevance, and movement that engage students and keep them interested.

tems such as counselors.

**Myth #4: Students Will Always Be Disruptive**

“One common myth that surfaces in teacher preparation is the idea of being underprepared for managing difficult or disruptive student behaviors in the classroom,” says Ellis Hurd, EDD, a professor at the School of Teaching and Learning at Illinois State University in Normal, Illinois. “Educators have sincere fears about getting in front of students due to this myth, particularly because disruptive stereotypes are seen on TV, in movies, and on social media.

“However, evidence strongly supports that educators will have decreased challenges in the classroom by preparing engaging lessons. When a lesson is ill-prepared, students naturally become bored and off task. Creating lessons embedded with activities, relevance, and movement engages students and keeps them interested in the content,” says Dr. Hurd.

**Eliminating the Myth-Takes**

Education myths endure because educators are human, and humans are vulnerable to logical fallacies. Mitigating these myths comes down to the individual educator, who must overcome the inaccurate belief and replace it with a new, more accurate paradigm.<sup>1</sup>

“Letting go of persistent myths is tough and requires more than a willingness to change; it calls for a shift in mindset,” says Scott. “To do it successfully, you must be willing to ... critically examine your own assumptions when evidence-based research is available and may say otherwise. Then, be will-

ing to move beyond the ‘if it’s not broken, don’t fix it’ mentality and try something new. This will ultimately lead to enhanced student learning.” ♦

**References**

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