



The Engagement Factor

How Teaching Them by Reaching Them Can Improve Your CPR Training Program

What premium would you place on the chance to achieve authentic student engagement? Our experience is that most educators would say, “A Lot!” Achieving student engagement is a fundamental challenge in any form of education, especially when there is a huge difference between the teacher’s expertise and the student’s.

If you are an instructor in Cardio Pulmonary Resuscitation (CPR), you’ve likely experienced the engagement gap—especially when teaching laypeople. Laypeople usually don’t have the added incentive that healthcare providers have to learn CPR. They typically don’t “need” a certification as a job requirement. They want to learn CPR for its intrinsic value. Perhaps they live with a family member or they know someone at risk of a cardiac arrest. Or, perhaps they saw an inspiring post on social media or were convinced by a friend. Regardless, most students enter a class driven by one common motivation – the desire to make a difference.

Few students, however, come in prepared for the necessarily prescriptive approach that certified instructors are required to follow in order to ensure compliance and quality control. They are not expecting the didactic training involved. They want to get right to it and practice on a manikin. They want to begin compressions. Few realize that they are actually being asked to learn a basic clinical skill, and with that goes an approach that, albeit brief, reflects the gravity of learning a clinical skill.

Students, especially laypeople learning CPR, are often surprised by the prescriptive training agenda necessary to impart a clinical skill. To help instructors improve their student’s learning experience, we outline how to apply the Kirkpatrick Model to CPR training. Drawing on expert insight, this article discusses:

- Engaging students from start to finish
- Ensuring students learn how to perform quality CPR
- Increasing learner confidence to save a life
- Making an impact on bystander CPR rates

The challenge for many instructors is that when students encounter this prescriptive approach, students may become disengaged. They may pass the tests – but, will they be motivated to perform later? How will they perform later? Will they tell someone else that learning CPR was a great experience and worth the investment in time?

If these are your concerns, there are ways you can address them. In the process you can not only deliver compliant CPR training, but even higher quality training that can lead to a better experience for you and your students.

One of the most tried and tested models for measuring training effectiveness is the Kirkpatrick Model. Trusted by educators for decades, the Kirkpatrick Model can help you target opportunities for engagement by addressing four simple, yet targeted questions. These questions can point you toward a more engaged learning experience while still teaching within the parameters necessary to teach compliant CPR.

In this article, we outline how to apply this model to your training so that you don't have to settle for just a few moments of true student engagement. Instead, you can achieve engagement during every class.

Got Engagement?

One student recounts his CPR training experience: “The trainer basically just read off of the slides. We had approximately a half hour total of hands-on for what was supposed to be a six hour day, with no testing or evaluation to determine if we're actually able to perform CPR properly without correction. Even with more than an hour of breaks, we still finished more than an hour early. I was definitely disappointed in this course.”¹

No educator wants to leave a student with that kind of impression. And, so it's important to ask, where are there opportunities within the confines of my curriculum to make the training more interesting, useful, and challenging? If learners are disengaged, the learning process can be at risk of becoming stagnant.

According to the Kirkpatrick Model, it is important to gauge each student's reaction to the material so that you can better identify what they need to stay active in the learning process.²

To truly engage learners in your course, you might consider including incentivized games. Gamification, or the process of applying game-related principles to learning, has become a popular way of motivating learners to participate.³ Some proven benefits include: students having an increased feeling of ownership over their learning more fun in the classroom, and more visible tracking of student learning progress.⁴

Professor Karl M. Kapp at Bloomsburgh University specializes in Instructional Technology and clarifies, “learners don't play an entire game from start to finish; they participate in activities that include video or mobile game elements such as earning points, overcoming a challenge or receiving badges for accomplishing tasks”.⁵ A growing body of evidence has shown that even physicians are turning toward online video games as a learning tool, requiring less time to learn necessary information and competing against other physicians.⁶ The use of gamification entering the healthcare field indicates that it has applications to learning life-saving techniques. And, it's important to note that gamification doesn't only benefit your younger students – forty-eight percent of adults over the age of fifty say that they play video games for entertainment.⁷

If you feel that your learners are not as engaged as you'd like, you may want to consider the addition of games. Friendly competition can make a big impact in the classroom; today's CPR feedback technology can help to facilitate this type of competition naturally.

“ The most effective gamification efforts include more than points and badges – they contain elements of a story, challenge and continual feedback as well as a high level of interactivity.”⁵

Karl M. Kapp
Professor of Instructional Technology
at Bloomsburgh University

No One Likes Precision Guesswork

After addressing learner engagement, the Kirkpatrick Model recommends that you move your focus to how much the students have learned. Do your students leave the course knowing when and how to perform effective CPR? Are they prepared to perform life-saving skills? In order to provide a comprehensive answer, you may need to more-accurately measure the quality of each student's CPR.

Instructors are required to spend considerable time explaining the "why" behind quality CPR, ensuring that students understand how to identify sudden cardiac arrest and what immediate actions to take. With today's manikin technology you can now show your students precisely how their performance relates to the content you have been teaching them.

Consider that the prescribed method for evaluating a student's skills has historically included using a stopwatch to gauge compression rate. Today, some devices measure chest compression fraction, rate, depth, and recoil, along with ventilations. The American Heart Association (AHA) has suggested that the monitoring of CPR quality is one of the most significant advances in resuscitation practice in the past 20 years and should be incorporated into every training program.⁸ The technology available to instructors ensures that students receive immediate and accurate feedback on their performance and leave class having truly learned a life-saving skill.

The American Heart Association's (AHA) 2013 Consensus Statement on CPR Quality lists five key metrics that correlate to better human survival:¹⁷

- **Chest compression fraction (CCF):** >80%
- **Chest compression rate:** between 100–120 compressions per minute
- **Chest compression depth:** 2–2.4 inches for adults and adolescents*
- **Chest recoil:** No residual leaning
- **Ventilation:** Less than 12 breaths per minute, minimal chest rise.

**Updated from 2013 to meet 2015 Guidelines.*

In addition, it's worth gauging how likely your students are to train others or continue practicing their CPR skills. Seventy percent of Americans feel helpless to act during a cardiac emergency because they either do not know how to administer CPR or their training has significantly lapsed.⁹ Understanding what sudden cardiac arrest is, knowing what to do in an emergency, and receiving accurate feedback and corrections during hands-on practice may encourage more bystanders to take action if and when the time comes.

In CPR training, the quality of a student's learning is reflected in the quality of their CPR skills practice. Feedback in real-time can provide you with the ability to accurately monitor the students and provide them with the best possible learning experience.



Do Your Students Trust the Skills they Leave With?

Measuring whether a behavior has changed can be difficult, and often the results are not immediately available. This is why the third level of the Kirkpatrick Model specifically advocates assessing behavior change (following training). In the context of CPR training, this leads to the question: will your learners perform CPR on a victim of sudden cardiac arrest?

Sadly, research shows that more bystanders stand by idly when faced with a cardiac emergency. Only forty-six percent of cardiac arrest victims receive CPR from a bystander.¹⁰

A study conducted by the American Heart Association delved deeper to uncover exactly why most people choose not to intervene.¹¹ Respondents said that they were afraid they might hurt the victim, that their skills were not updated, and that they did not feel confident to perform CPR, among other reasons. Thirteen percent of respondents said that they actually had the opportunity to perform CPR on someone in cardiac arrest, but didn't.¹²

Dr. Rob Rosenbaum, emergency doctor with Christiana Care Health System and EMS director for New Castle County, Delaware, states, "Getting past those psychological barriers of fear and denial means many more lives that could potentially be saved... Some CPR is better than no CPR"¹³ For instructors, this may mean an increased focus on improving learner confidence.

Providing competent skills practice, both in duration and quality, can leave students with the confidence boost they need. Rather than simply understanding the mechanics of good CPR, students gain confidence through repetitive practice, accurate performance feedback, and the reinforcement of proper technique. At the very same time, you'll be able to accurately and objectively measure your student's performance, as well as assess whether they need more coaching to improve their confidence level.

The more confident students are in their performance, the more confident they will be to take action when it's needed. Instructors who provide positive reinforcement and thorough coaching may help to build this confidence.

“Far more damage comes from doing nothing.”

Sean Culliney
EMS Training Coordinator

Starting in January 2018, as a commitment to improve student training, the Red Cross will incorporate CPR feedback devices in all classes delivered directly by Red Cross and recommend CPR feedback device usage for all training partners.¹⁸



Effective January 31, 2019, the American Heart Association (AHA) will require the use of an instrumented directive feedback device in all courses that teach adult CPR skills.¹⁹

Are You Creating the Impact You Want To?

When measuring the overall results of your training, the number of lives saved carries the most weight. Every minute and a half, someone in the United States goes into cardiac arrest outside of a hospital.¹⁴ Four out of five times, the victim is at home.¹⁵ Because of this, it isn't typically a paramedic or a doctor beginning CPR on a victim – it's a layperson, a victim's friend, a victim's loved one.

As a CPR instructor, you have the ability to prepare them to save a life. With the most engaging training methods, positive learner attitudes, and the right tools, students can leave your class feeling as inspired as they did entering it. The ultimate result of your training will be when your students some day take action in a cardiac emergency.

With current bystander interventions at only forty-six percent, there is still progress to be made. However, every student that performs CPR on a victim within two minutes is a step forward – doubling or tripling that victim's chance of survival.¹⁶ Incorporating measurement, assessment, and feedback into the training may better prepare them for optimal performance. And, that can give them the skill, the confidence, and the inspiration to act when the moment counts. That's a great legacy to create each time you teach a class.

If you would like to reinstall engagement in the classroom to improve your learner's experience as well as your own, please contact us. We have solutions to help.

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