

WAKE UP CTE INSTRUCTION WITH ACTION-BASED RESEARCH

By Michael Holik

IN AN AGE OF ELECTRONIC DISTRACTIONS, EDUCA-TORS ARE CONTINUOUSLY STRUGGLING TO KEEP

students engaged in their classrooms amidst competing distractions. Career and technical education (CTE) classrooms are not exempt from this dilemma. Although a large component of most CTE classrooms is kinesthetic, hands-on learning in a lab environment, there is also the fundamental, theoretical component that needs to be taught as well.

As a CTE teacher, I have been attempting to bring down the walls of the traditional classroom, with intentions to not only compete with but also beat those electronic distractions. Determining the best way to achieve traditional classroom demolition and attainment of higher student engagement would involve action-based research.

Action-based Research: The Lesson

Action-based research is a type of research completed by a person, often a teacher, who has a desire to positively transform • Let's face it, teachers can get just as bored with the material and delivery methodology as students. I challenged myself to wake up my sleeping, unengaged students and make my classroom the new distraction and not their electronic devices.

his or her own teaching practices through self-evaluation. By participating in his or her own study, the teacher delivers a lesson, reflects on the lesson and finally makes necessary changes for improvement. Self-participation is an additional benefit of action-based research, as is the ability to report findings from a first-person perspective (Hendricks, 2012; Herr & Anderson, 2015).

Other types of research, *e.g.*, quantitative or qualitative, require the researcher to remain separate from the study and report in the third person (Creswell, 2013). Although action-based research can incorporate both quantitative and qualitative components, it can still be reported from the first-person perspective (Hendricks, 2012; Herr & Anderson, 2015).

The "Environmental" Challenge

Many classroom formats are the same semester after semester, year after year. That is why it is commonly known as the traditional classroom, or a teacher-centered learning environment. Usually, the teacher stands in front of the classroom speaking *at* the students, not with them.

In CTE classes, the lectured material is often directly related to the lab com-

ponent, therefore, the lessons are of vital importance; yet many students still "check out" of the lesson and "check" into their electronic social media. There will always be some students who consistently remain engaged and excited to absorb the knowledge elucidated by the teacher no matter the delivery methodology. However, from my research, no matter how important the information is, if the delivery is not executed in a fun and engaging way, students will struggle to stay engaged in the traditional classroom.

Let's face it, teachers can get just as bored with the material and delivery methodology as students. I challenged myself to wake up my sleeping, unengaged students and make my classroom the new distraction and not their electronic devices. If I were going to be successful at demolishing those traditional walls of teacher-centered learning and create a new environment, I would have to subject myself to self-reflection. What's more, I would have to learn how to create a student-centered learning environment, where the teacher and the students learn collaboratively and actively. When students can take ownership in their education, they do better (Reeves, 2008).

The Action Plan

I began to pull ideas from well-known methodologies I was most familiar with, such as quantitative or qualitative research. Neither one would afford me the opportunity to get involved as closely as I preferred, but then I remembered a lesson about action-based research from a professor. It was the perfect research methodology to meet my personal challenge!

I started brainstorming ideas for the student-centered classroom I wanted to create, and began generating engaging and exciting lessons to achieve those goals. Creating the new environment was going to be relatively easy, but measuring levels of student engagement and enjoyment to ensure validity and reliability would be the challenge. This is when I decided I would need to create my own instruments to monitor and measure the outcomes of my study.

Data Collection

Tools used in action-based research are often the same ones used in the more common research methodologies, *i.e.*, surveys, interviews, journals, case studies, checklists, observations and existing data (Hendricks, 2012; Herr & Anderson, 2015; Sagor, 2011).While many of these • Continue to challenge myself to be a better educator, which simultaneously challenges my students to do more critical thinking and take more ownership in their education. Students will notice the time and effort you put into this new classroom environment and will thank you for your efforts?

tools are components of other research methodologies, in action-based research, the researcher, also a participant, is able to design, utilize and analyze his or her tools—ultimately creating a more personal connection with the findings of the study (Herr & Anderson, 2015). Another benefit is the tools can be designed to specifically align with the content the teacher wishes to teach (Sagor, 2011).

Tools of the Trade

For my study, there were four main areas I wanted to focus on with data collection: student perceptions, student engagement, personal performance and academic success. To gather student perceptions, I created digital surveys with qualitative and quantitative questions using Google docs. This allowed me to electronically send the surveys to all my students, and it allowed the students to provide honest, anonymous feedback. It is important to protect the anonymity of students to elicit honest responses. The responses were then compiled in a spreadsheet so that I could view them in an organized format.

To collect levels of student engagement and evaluate my own performance, I created two simple journals. Each journal asked different questions: one focusing on student engagement and the other on personal performance. I answered the same questions during non-lab classroom days for 16 weeks. Along with the student engagement survey, I created a Likert scale which allowed me to assign levels of engagement to each student, each month of the study. The Likert scale provided individual student data, as well as overall class engagement data.

Lastly, to collect data on student academic success, I developed a pre-test administered at the beginning of the semester to create a baseline of performance. At the end of the semester I administered a post-test, which allowed me to compare the student results after participating in the study for 16 weeks. To provide further validity and reliability to the study, I used the same tools utilized in a traditional classroom without student-centered learning, and compared the results.

Drawing Conclusions

Before I participated in my own action-based research and study, I thought I was doing well: that I knew the levels of student engagement in my classes, or lack thereof, and that I had a firm grasp of which lessons were effective or ineffective. However, forcing myself through this journey of personal discovery revealed meaningful data. The most significant personal benefit to participating in my own action-based research and study was learning about my teaching methodology; that my innovative attempts had not gone unnoticed and were well-received by the students. Although difficult to acknowledge, there were negative student perceptions about a few teaching methodologies I had been using for many years. Outwardly, students seemed to enjoy them, but when given the chance for honest anonymous feedback, I was able to learn their true perception of my activities.

Additionally, the study revealed student benefits, such as engagement and academic performance, do increase in a student-centered classroom, compared to a teacher-centered classroom. The results from my study cannot be considered "significant" in scientific terms and cannot be generalized to all CTE programs. However, experiencing increases in positivity, engagement, excitement and academic success in my classrooms was significant to me. Gaining self-awareness about my teaching methodologies was priceless.

While I've always been a passionate and innovative teacher, I have never had the courage to completely demolish those traditional classroom walls in favor of big change. I will say that conducting my own



action-based research and study has been one of the most effective pieces of professional development I have ever had, aside from my graduate and doctoral education.

I continue to challenge myself to be a better educator, which simultaneously challenges my students to do more critical thinking and take more ownership in their education. Students will notice the time and effort you put into this new classroom environment and will thank you for your efforts.

I am glad I participated in my own action-based research and study; I became a better teacher for it. **Tech** Michael Holik, Ed.D., is an online Hospitality Management instructor at Ozarks Technical Community College and an adjunct graduate professor at Widener University. E-mail him at holikmresearch@gmail.com.

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REFERENCES

- Creswell, J. (2013). *Research design qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications. Inc.
- Hendricks, C. (2012). Improving schools through action research: A reflective

practice approach. Third edition. Upper Saddle River, NJ: Pearson Education Inc.

- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: A guide for students and faculty*. Thousand Oaks, CA: Sage Publications, Inc.
- Reeves, D. (2008). The learning leader: Leadership for student empowerment. *Educational Leadership*, 66(3), 84-85.
- Sagor, R. (2011). *The action research guidebook: A four-stage process for educators and school teams*. Second edition. Thousand Oaks, CA: Corwin Press, Incorporated.