
INVITED COMMENTARY

What does it really cost when we don't pay attention to IMPLEMENTATION?

Written by Gerald R Williams
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Recently I read an article by Robert E. Slavin entitled, "It's Proven. It's Perfect. I'll Change it."

A quote from this article, "*The research field is full of examples of programs that consistently work when implemented as intended, but fail miserably when key elements are altered or completely left out*" particularly caught my attention.

Like anyone else that has been in education for any length of time, I too have seen many programs and practices come and go, not because they were bad ineffective programs and practices, rather because they were implemented poorly. Dr. Slavin contends these programs were implemented poorly do to the fact that implementers, (i.e. teachers and administrators), believe that full and effective implementation of these programs and practices would be "taking away their creativity." I would like to present a different perspective on the causes of poor implementation I believe I can make an equally strong case for.

In the field of education there has been very little education or emphasis placed on just what is effective implementation, what is necessary to effectively implement an Evidenced-Based Program or Practice or and Evidence Informed Innovations (EBPs/EIIs), and what is the "cost" for not striving for and achieving full implementation. For that matter, I suggest that if you asked a hundred educators what full implementation of program ABC looked like you would get at least 50 distinct answers. I base that prediction on my experiences as a school site administrator for several schools.

A strategy I liked to use on the first day with staff at each of the schools, was that I would ask the staff to write down on a piece of paper their response to the following prompt: *What is the purpose of education?* I would then put all their responses in a box and randomly read what the teachers had written. I and the staff were always amazed on how varied the responses were. It was no wonder we weren't achieving more growth in student learning, - we didn't even agree on the reason we came to work every day!

Teachers and school staff attend years of training to become educators and still don't agree on the purpose of education. In addition, schools spend thousands of dollars for "professional development" events or purchase manuals for new EBPs/EIIs to be adopted, yet there is typically a lack of consensus on WHAT that EBP/EII looks like in practice. Finally the lines are further blurred or more disjointed is their understanding on HOW the "implementation" of these should applied. These are the dedicated individuals that are the "front line" to delivering high quality teaching to all students. Yet, the system does not seem like it is created to help ensure their success.

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The challenge of a disconnected system, a lack of common understanding or agreement, and minimal focus on building supports for teachers or staff to use programs as intended (with fidelity) is further compounded when broad system-wide innovations such as Response to Intervention (RtI), Multi-Tiered System of Supports (MTSS), and Positive Behavioral Intervention and Supports (PBIS) and/or multiple EPBS/EIIs are adopted by schools and districts.

However, there is a solution. I propose we as a profession, take up the discussion of the importance of effective implementation practices and the cost of *ineffective* implementation practices.

There are a number of studies (Greenhalgh, MacFarlane, Bate, & Kyriakidou; 2004, Fixsen, Blase, Duda, Naoom, & Van Dyke; 2010) that compare the intensity of the use of a program or practice with the means in which it was implemented. There are essentially three ways a program can be implemented.

- 1) **We can let implementation happen.** In this model we provide training to teachers and administrators in a program or practice and tell them to go forth and prosper providing little or no support for its implementation. The teachers and the administrators are responsible for making effective implementation happen,
- 2) **We can help implementation happen.** Here we may provide follow up training or additional materials if staff seek out assistance. Teachers and administrators are still the ones responsible for implementation and getting desired results, or
- 3) **We can make implementation happen.** One huge difference in this model is the shift in responsibility for success. Unlike the previous two models in the “Making It Happen” approach to implementation, the implementation system is accountable for ensuring desired outcomes are achieved. This requires the purposeful use of the principles of Applied Implementation Science.

Yes Virginia, there is a science to effective implementation! Properly applied by Leadership and Implementation Teams, the principles of Applied Implementation Science can make the difference between 14% of interventions reaching full implementation (meaning consumers actually receiving the intervention) in 17 years and 80% of interventions reaching full implementation only 3 years. (Balas & Boren, 2000; Fixsen, Blase, Timbers, & Wolf, 2001). Let’s pause for a moment and think about those statistics.

1. *How many students will come and go through your school doors in 17 years?*
2. *What if only 14% of those students graduated with the skills you intended to impart in them?*

Despite the well-meaning intentions of educators, when we don’t focus on HOW to apply and integrate the very EBPs/EIIs we selected to improve outcomes for students, this is a risk we take.

Keeping the idea of building the skills of educators in their application of EBPs/EIIs (with fidelity), this research is in line with meta-analysis conducted by Joyce & Showers (2002), that found without follow up coaching support we should expect no more than 5% sustained use of a practice or program teachers have received training for. Again, let’s pause for a moment. Consider the professional development calendar for your last school year.

1. *How were professional development events selected?*
2. *Was the purpose for information or for skill building?*
3. *For the events that had the purpose of developing new skills, do you know if it made a difference in adult behavior in the classroom?*
4. *How do you know?*

Having an effective coaching system is one of the foundational drivers in implementation science and no, having coaches doesn't constitute having a coaching system.

All this research and data got me to thinking about the high cost of ineffective implementation practices (letting it happen or helping it happen). So I decided to do a little research on the web to find scholarly articles on the topic of the cost of not properly implementing educational programs and practices. I did find a number of articles on the cost on poor implementation practices but they weren't exactly focused on the topic of educational practice. There were articles such as a 2007 paper, "Effect of Guideline Implementation on Costs of Hand Hygiene", or a 2013 article, "Comparative Effectiveness of Implementing Evidence-Based Education and Best Practices in Nursing Homes: Effects on Falls, Quality-of-Life and Societal Costs", or a 2012 article in business magazine, "So Near, So Far-the Costs of Poor Implementation." But my all-time favorite is found in a 2012 issue of the Journal of Building Performance, "IMPACT OF NON-IMPLEMENTATION OF TIME, COST AND QUALITY MANAGEMENT PROCEDURES IN THE NIGERIAN CONSTRUCTION INDUSTRY." Now I don't in any way want to downplay the importance of having an efficient and effective construction industry in Nigeria, but I believe there is a case to be made that the education of our youth deserves at least equal attention and focus.

Since my quest for information on the cost of poor or ineffective implementation of programs and practices came up empty, I decided to take a stab at some rudimentary calculations on my own based on my own experiences. I decided to create an example of the "Average Unified School District" and use it as an example for developing a cost estimate for setting staff up for poor program implementation.

Cost of poor program implementation at Average Unified School District

Let's say for example Average USD decides to allocate \$100,000 a year for three years for training on a specific Evidenced-Based Program or Practice. Let's say the three day trainings cost \$500 per participant. Therefore, Average USD is able to train 200 teachers and administrators a year for three years. At the conclusion of the three years Average USD will have trained 600 educators! They send teachers and administrators to the trainings, provide support materials, and ensure staff this program/practice will be a focus for the district for at least three years. They are even going to make full implementation of this program a part of the site administrators' yearly evaluations and they will be using expected student outcomes as the metric for the administrators' evaluations right from year one. That's how dedicated Average USD is to full implementation of this program/practice!

Since students cannot benefit from programs or practices they don't receive, let us use the Joyce and Showers (2002) research as the basis of our cost of poor support for translating the training into actual use in the classroom. Over a three year period Average USD would have spent \$300,000 for training for its teachers and administrators plus whatever materials were needed. This also does not account for staff turnover, and new staff that need exposure to the training series. Based on the findings of Joyce and

Showers, we can calculate that of the 600 educators trained, we can expect to see this program/practice in 30 classrooms (5%). That means we trained 570 teachers at \$500 each for a cost of \$285,000 that we will see little or no evidence of implementation (use) of that program or practice in their classrooms. The implementation research science is clear that if the core components of a program/practice are not implemented with fidelity you cannot expect student outcomes comparable to those obtained in research studies and that is the most expensive cost of all.

Without focusing on skill-building to improve fidelity to EBPs/Ells, an average district may spend \$300,000 on training for 600 staff and only achieve a Return on Investment of 30 teachers actually using the EBP/Ell in their classrooms as intended. Therefore, most students will not benefit.

As an alternative what if Average USD took a portion of its professional development budget and trained its district management team, site leadership teams, and coaches in the foundational principles and practices of effective implementation of programs and practices. One of the benefits of becoming proficient in application of implementation science is it works with any evidence-based program or practice. In future postings we will discuss what it takes to get started on the journey of transforming your district into an organization where highly effective implementation practices become the way you operate on a daily basis.

Warning: embracing implementation science principles and practices will change your life!

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ABOUT THE AUTHOR

Gerald R. Williams holds a MA in School Administration from Azusa Pacific University and a BSE in Elementary Education from Missouri Southern State College. He trained administrators and staff in the use of student achievement data to inform instruction and interventions during his time at San Bernardino County Superintendent of Schools (SBCSS) and ETS Pulliam. As a site administrator Mr. Williams provided effective leadership which lead to large gains in student academic outcomes. Mr. Williams also has extensive experience providing targeted support to Program Improvement districts and school sites.

Mr. Williams is experienced in the effective implementation of PLCs and Academic Rtl principles used in the development and implementation of interventions and Evidenced-Based Practices designed to the specific needs of students. He has also received extensive training/coaching in Applied Implementation Science (AIS) by Dr. Duda and Ms. Sims at the National Implementation Research Network (NIRN) at University of North Carolina Chapel Hill.

Currently, Mr. Williams serves as the Director Educational Services for the Placer County Office of Education (PCOE). He is a member of the PCOE Regional Implementation & Leadership Team (RILT). He serves as a senior member of the Implementation Scientists, LLC Coaching Action Network (CAN) and in 2014, was appointed as a member of the National Advisory Board for State Implementation & Scaling-up of Evidenced-based Practices (SISEP).

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