

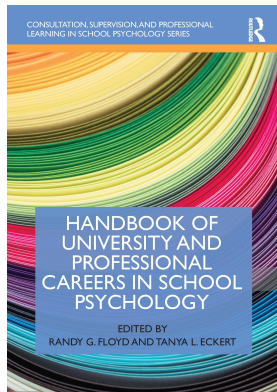
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## **Handbook of University and Professional Careers in School Psychology**

Randy G. Floyd, Tanya L. Eckert

### **Bridging Science and Practice**

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Amanda M. VanDerHeyden, Seth F. Aldrich

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## 9 Bridging Science and Practice

### Be the Hyphen

*Amanda M. VanDerHeyden and Seth F. Aldrich*

The scientist-practitioner model was conceived during the Boulder Conference in 1949 in response to post-World War II mental health needs of veterans, the growing profession of applied psychology, and concerns about quality control of psychology graduate programs. As an emerging science, it was determined that professional psychology would be based in empiricism, and thus dynamic, as opposed to a fixed set of principles (Baker & Benjamin, 2000). At its core, the scientific-practitioner model is the integration of scientific research, training and practice (Belar, 2000). More recently the scientific practitioner model has been defined as an approach to problem-solving that is empirical (Huber, 2007). Tilly (2008) described the problem-solving process as quintessential to scientifically based practice as a school psychologist, with four guiding questions driving its use:

- Is there a problem, and what is it?
- Why is the problem happening, or what is causing the problem?
- What can be done about the problem?
- Did the problem solution work?

The multi-tiered systems of support (MTSS) model is an infrastructure in schools to support evidence-based problem-solving (Tilly, 2008; Ysseldyke et al., 2006). However, a recent survey of school psychologists suggested that engaging in evidence-based practice may be especially challenging for school psychologists. Walcott and Hyson (2018) conducted a survey of National Association of School Psychology (NASP) members. The vast majority of respondents (83%) worked as school psychologists in schools as compared to university faculty (7%) and school administrators (5%). These school psychologists reported spending most of their time conducting individual eligibility evaluations for special education or participating in Individualized Education Program (IEP) meetings. Collecting and analyzing student data to identify strengths and needs and participating in problem-solving meetings were more rare actions. In fact, collecting and analyzing data to develop and evaluate system-level or school-wide programs was the activity for which school psychologists reported spending almost none of their time. Some would argue that without analyzing system-level data and responding to outcomes, education cannot be scientifically based practice and may be of little benefit to students and families (Detterman & Thompson, 1997; Reschly & Ysseldyke, 2002; Sleeter, 1986). Historically, common practices in school psychology, most typically conducted in the name of special education eligibility decision-making, have been heavily criticized for not providing benefit to students (Gresham & Witt, 1997). Yet, state and local regulations continue to allow and even encourage the continued use of such practices (McGill, Dombrowski, & Canivez, 2018; Maki, Floyd, & Robertson, 2015), putting the primary actions of most school psychologists directly at odds with recommended practice in school psychology (Ysseldyke et al., 2006).

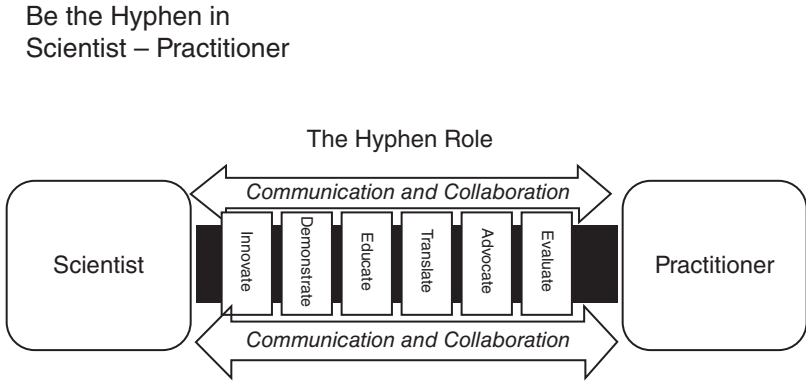
MTSS has emerged as a cornerstone of contemporary school psychology (Ysseldyke et al., 2006). Because MTSS requires decisions be informed by student and system data, school psychologists, ideally, would be immersed in data collection, analysis, and active consultation to move colleagues to engage in data-driven decision-making and practices. This shift from primarily functioning as a testing agent to working side-by-side as an instructional ally to improve learning and mental health outcomes, to solve systemic problems, and to make special education eligibility decisions in concert (Shapiro, 2000) has created an opportunity for shifts in the field of school psychology. First, school psychologists working in practical, front-line environments have unprecedented access to student and system data. Second, school psychologists are often considered the on-site “data experts” who provide guidance more broadly about evidence-based practices, technically adequate data collection, and program evaluation designs that allow for more conclusive recommendations to support student academic and social emotional and behavioral supports (VanDerHeyden, 2018).

This shift has occurred over the last 30 years, with a dramatic acceleration in the early 2000s given several keystone and mutually referential policy and legislative actions (see Kovaleski, VanDerHeyden, & Shapiro, 2013). This shift has had two major implications for practicing school psychologists. First, as the field has shifted, some school psychologists have had to acquire new skills. Second, new opportunities have emerged for field-based research, which has created opportunities for practitioners to engage directly in research, not from university positions, but rather from more front-line practice positions.

Ed O’Connor, one of the contributors in this chapter, described the professional action space that exists between the idealized vision of science and the realities of work as a practitioner. O’Connor noted the challenges of satisfying the ideals of science and the day-to-day realities of practice simultaneously. O’Connor stated,

At the end of the day, I have come to believe that the Scientist-Practitioner model provides an idealized vision for how individual school psychologists may strive to practice. However, I have also recognized that it is impossible to perform at high levels in both realms simultaneously. Thus, I have come to believe that there is a need for individuals with school psychology training who exist in positions that stand between research and practice and who work in the “space” that exists between both research and practice, which Dr. Brad Niebling and I call “being the hyphen.”

Figure 9.1 represents a visual of the important roles that individuals willing to carve out non-traditional roles and practice opportunities can play in school psychology.



*Figure 9.1* Illustration of the space between “Scientist” and “Practitioner” provided by Ed O’Connor.

Eight contributors to this chapter have worked to integrate science into the practice of school psychology and embody this hyphen role. Each contributor provided written answers to a series of questions, which are the basis for this chapter. These contributors work in hyphen roles as educational leaders, professional development directors, executive directors of professional organizations (e.g., the National Association of School Psychologists [NASP]), influential consultants and policy advisors, and national leaders in building and supporting the use of technology to facilitate the work of school psychologists in schools.

Contributors, who we will subsequently refer to as “hyphens,” included (in alphabetical order): (a) Sarah Brown, Senior Director of Learning and Development at FastBridge Learning; (b) Kim Gibbons, Director of the Center for Applied Research and Educational Improvement; (c) John Humphries, School Superintendent, Thorp School District in Thorp, Wisconsin; (d) Kathleen Minke, NASP Executive Director; (e) Paul Muyskens, product manager for Spring Math; (f) Ed O’Connor, Executive Director, Midwest Instructional Leadership Council; (g) Ben Silberglitt, Co-founder of Cedar Labs; and (h) Jim Wright, developer of *interventioncentral.com*. Each hyphen responded to the following questions:

- 1 How did you decide to work outside of a conventional academic setting or in an area of research or practice that is less traditional for a school psychologist?
- 2 What is your current role? And how did you get here? What experiences best prepared you for the work you are doing now?
- 3 How do you collect and use evidence in your own practice?
- 4 What do you think is the best way to disseminate evidence? What do you think is the best way to influence others to use evidence in school psychology practice?
- 5 What are some design limitations that are pertinent for researchers in applied research settings?
- 6 What are some opportunities you have found beneficial in your role as an applied researcher (e.g., faster timeline to implementation of findings or policy adjustments, opportunity for closer measurement of integrity, and more contextualized research questions)?
- 7 What are the obstacles that practitioners face when gathering data to answer important questions and what have you found beneficial to make data collection feasible in a way that addressed the important questions?
- 8 When school psychologists in practice collect data, it is frequently to guide their own decisions, but there are other audiences for the information. Where are the obstacles of collecting and communicating data in a way that there is shared decision-making using best evidence? What have you found as effective in getting buy-in and use of data? Are there ways of disseminating such information that can guide future decisions (professional development, resource allocation, and administrator approval of time allocated to various professional activities)? Are there outlets for data collected the local level to be shared at a statewide or national level (e.g., blog, website, and publication)?
- 9 What are the obstacles as consumers of research that school psychologists face when trying to implement best practices as presented in research? How have you been able to integrate research into practice? What are your concerns about and how have you worked to address them?

Thematic responses emerged about contributor’s experiences working in the space between scientist and practitioner, which we will summarize in each section that follows.

### **Hyphens Are Problem-Solvers and Most Often their Solutions Rely on Technology**

One theme that emerged in contributor responses was that in each case, these hyphens saw a need or a problem that they wanted to solve. If new skills were needed to solve that problem,

they found ways to acquire the skills so that they could be useful in solving the problems they were passionate about solving. Each contributor also spoke about introducing these new skills to a field that was not yet aware of the potential for those skills to be of use.

Silbergliitt, for example, described his career beginning in St. Croix River Education District as

really just a series of opportunities to solve problems. Because we were able to develop a system of assessment where all students were regularly and reliably screened, we were also able to use these data to inform us at a systems level, and this gave me the opportunity to start conducting some applied research that might benefit other systems that were working to improve outcomes for students.

O'Connor described how the school psychologist in the 1990s was primarily someone who tested students and led eligibility determination meetings, which he found was not satisfying work that seemed to make a lasting impact on students' lives. O'Connor stated,

I was soon unsatisfied with this role in the test and place zeitgeist of the day. Early on, I recognized that many of the issues leading to student school difficulties were rooted in the lack of high-quality instruction that would meet the needs of those entering this school system. Thus, I sought out opportunities to demonstrate my skills in effective assessment and statistical analysis to produce quantitative representations of patterns of student outcomes in this system. The data patterns I produced were more indicative of system-wide issues than individual student needs. This got the attention of district and building administrators as they began to recognize that special education could not solve these problems. At this time, the Response to Intervention initiatives were beginning to take hold, and I was also able to leverage this momentum to support the district in becoming an early adopter of both adaptive assessment for screening, and Curriculum Based Measurement (CBM) tools for benchmark testing and progress monitoring.

Almost all contributors described use of technology as a driving force to collect, analyze, and disseminate information as part of problem-solving within MTSS. These technological supports emerged in concert with MTSS beginning in the 1990s. Across the past 25 years, technology dramatically changed the way in which school psychologists learn, conduct, and communicate research in their practice. For some, technology solutions became their focus, and for others, technology simply became a tool to have a broader impact on student learning outcomes. Five of our hyphens are leaders in using technology to improve learning. In each case, these hyphens described a need that they felt could be solved using data and technology-driven solutions.

Minke, currently the executive director of NASP, stated,

At NASP, we prioritize providing resources to school psychologists that are evidence-based. In addition to our excellent cadre of volunteer leaders, we have school psychologists on staff and a position dedicated to research to help us achieve this goal. We want practitioners to be able to come to our website and be confident that the resources found there have been fully vetted and represent the best available information. One of the challenges we face is how to respond when evidence is equivocal and when there are controversies in the field regarding interpretation of the body of evidence. Our members, understandably, are dissatisfied with reading: "More research is needed!"

In my experience, school psychologists are committed to the use of evidence-based practices. However, unlike my early days as a practitioner where the lack of information was a huge barrier, now the barrier is too much information from too many sources. School

psychologists are well positioned to assess the value of particular programs for particular uses; they can evaluate the claims being made by proponents and make recommendations regarding the applicability of products to the population served by their schools. However, the sheer quantity of information makes it difficult to cut through the noise and make good decisions. It is important to get research into formats that are brief and fit into the busy schedule of practitioners. We are still working on how best to do this, but it appears that podcasts, infographics, and highlighting key findings via various social media outlets are promising.

Wright, founder of [interventioncentral.org](http://interventioncentral.org), saw an early need for what he referred to as “information arbitrage” or a mechanism to get clinically actionable information into the hands of practitioners who made use of best-available research evidence.

While burrowing through stacks of research journals, though, I discovered there is a large body of scientific information of immediate practical use to schools that was instead collecting dust on library shelves. It dawned on me that at least one useful role that a school psychologist such as myself could take on as a scientist-practitioner would be to engage in “information arbitrage”—the translation of already-existing research into a format that could be disseminated to educators.

Wright described how his vision came to life in the early days of the World Wide Web. He stated,

I became entranced by the possibility of building a web site that would allow me to instantly “publish” a collection of intervention-related resources instantly accessible to anyone across the globe with an online connection and a browser. . . . I was enrolled in a doctoral school psychology program at the time but dropped out to teach myself web programming. Soon after, I launched a website, [www.interventioncentral.org](http://www.interventioncentral.org), which I still maintain as a repository for my intervention-related resources.

Information resources such as [interventioncentral.org](http://interventioncentral.org) and [nasponline.org](http://nasponline.org) would not have been possible without school psychologists working as hyphens, identifying a problem that could be solved using technology and gaining the skills needed to deploy the technology solution. Other school psychologists saw the need to simplify the organization, interpretation, and MTSS decision-making via the use of web-based assessment and intervention systems.

Muyskens, who began his career working with Stan Deno and Doug Marston on CBM in the Minneapolis Public Schools said,

I have found that practitioners want a data collection system that is easy to use, that summarizes the results, and that is easy to understand. This simplicity is best operationalized in the beauty of CBM as envisioned by Stan Deno (Jenkins & Fuchs, 2012). Often times, the easiest way to make this possible is through the use of technology, but trying to apply technology in a real-world setting is like trying to eat peas with chopsticks. Things like different hardware, Wi-Fi networks, competing and constantly updating web browsers, and evolving software make implementation an ongoing challenge. And then there is data security. Practitioners don’t, and shouldn’t have to, worry about these variables. The goal is to have an application that is fast, secure, and as easy to understand as a stop sign. We can provide users with the information they need to begin a deeper level of inquiry.

Like Muyskens, Silberglitt’s motivation also focused on accessing data to make decisions and stemmed from his interest in “measurement and assessment, systems-level problem-solving,

linking assessment to instruction, using data effectively, and dissatisfaction with a traditional school psychologist role.” Silbergliitt stated,

I also realized that, in order to prevent me from being the bottleneck for using data in the district, we needed to get some technology in place. I co-authored a grant with my colleague Marc Johnson, to create a technology system to support data-driven decision making at all levels of the organization, from the individual student to the broader system.

Silbergliitt has worked as a leader at TIES (i.e., Increasing **(T)ime, (I)nstructional** Effectiveness, **(E)ngagement**, and **State and District (S)upport** for Inclusive Practices), a non-profit, and currently is a founder of Cedar Labs with a focus on building software to integrate systems, so that they can, in Silbergliitt’s words,

talk to each other efficiently, that data are accurate, and that data privacy can be managed and enforced easily by the school or district. Most schools have around 2,300 instructional days to get a student from kindergarten to a diploma, and they don’t have time to spare to sort out why they don’t have data on a new student, why they can’t get a student logged in to a critical system, or whether the new software they are using is respecting the school’s data privacy policies.

Of his work as a district leader at Intermediate District 287, he said,

The problem to solve here is how to apply these same principles of systematic assessment, tiered supports for students and staff, and systems-level decision-making to a district with such an incredibly wide range of students . . . and it has been a fantastic learning experience.

Brown’s interest in technology and her work with Fastbridge Learning are about changing the work of the adults who are using the technology to help students. Having previously led the Bureau of Learner Strategies and Supports for the Iowa Department of Education, Brown has a passion for helping systems more effectively meet the needs of all learners. Brown said,

From my current perspective, people want information immediately, at no cost, and with the punchline first. Evidence needs to be provided in brief texts in online settings that aren’t behind paywalls. It needs to be provided in language that is both easily understood by people without a PhD AND should describe the precise steps to take to implement the practice.

She went on to say,

Once shared, evidence-based practices fail to be implemented for two primary reasons. First, educators don’t have the efficacy to implement the practices. Most people cannot read about an evidence-based practice (or even sit through a training on one) and then go do it. They need practice and feedback to feel confident and able to integrate it into their work. Second, the infrastructure of many schools makes it really challenging to implement evidence-based practice. The system itself needs to provide supports (e.g., planning time, coaching, and scheduling support) to make evidence-based practice work. I’ve found that when people see success with something, they continue doing it. If we can get people to the point of being able to celebrate a success with an evidence-based practice, even if the success is their own efficacy improving, there is a good chance the practice will continue!

## Relationships and Mentors Are Important

Nearly all contributors identified relationships as an important factor in shaping their hyphen careers. Relationships with mentors, other psychologists, and the educators whose adult behaviors they were tasked with changing were pivotal. Gibbons, who has served as the executive director of St. Croix River Education District and now is the director of the Center for Applied Research and Educational Improvement, attributed the direction of her career path to the first step recommended by Mark Shinn,

When it came time to do my internship, I asked my program chair (Dr. Mark Shinn) where I should go that would be a good match for my skills. He immediately replied, “Go work with Gary Germann at St. Croix River Education District in Minnesota.” I took his advice and worked in two school districts as a school psychologist and a teacher for students with emotional and behavior disorders in one elementary school. Throughout my internship year, I found that anytime I encountered a problem or an issue, I immediately began dissecting the system looking for ways to prevent similar problems from occurring in the future. I also saw a huge need to improve general education instruction as many of the referrals to special education were occurring because of a lack of effective instruction. Initially, my plan was to complete my internship and then apply for jobs in higher education. However, Gary Germann offered me a position that was far too intriguing to turn down. Gary’s vision was to partner with an institution of higher education and co-create a master’s degree program for teachers that would focus on improving their instructional practices through applied classroom experiences and projects. The traditional model at the time was for teachers to take courses at colleges or universities, complete the seat time requirements, obtain course credit, and submit credits to their districts to make a lane change on the salary schedule. The new model was that teachers would take courses that would require them to demonstrate newly learned skills in the classroom before earning credit. Courses would be offered locally rather than requiring teachers to travel up to two hours to the closest university. I was hired to identify a partner university, develop a curriculum and the scope and sequence for the Master of Education program, recruit participants, partner with faculty to teach courses and design projects, and provide instructional coaching to teachers enrolled in the program. We partnered with the University of Minnesota, and I spent four years coordinating this program and teaching classes. This experience “sealed the deal” for me in terms of working in a more non-traditional role that was focused on system change through improving instruction.

Silberglitt described a similar first step influenced by his graduate school mentors, “I really just followed the path paved by Stan Deno, best encapsulated in his 1995 work on “School Psychologist as Problem Solver” (Deno, 1995). I was fortunate to be in a progressive institution, at the University of Minnesota, and to have a very understanding advisor in Scott McConnell, who helped me understand that the traditional school-based school psychologist was just one of many roles that school psychologists can have in education. From that point forward, I didn’t worry as much about where I was going to end up and just focused my graduate program on those areas I was interested in: measurement and assessment, systems-level problem-solving, linking assessment to instruction and intervention, and using data effectively.”

Hyphens also described the importance of relationships in changing adult behaviors to result in measurable improvements for students and schools. These relationship dynamics were noted to be complex and challenging. Humphries stated,

In seven years working at the state education agency level, I saw the impact that high-quality evidence-based intervention could have on seemingly intractable problems and watching



the development and growth of response to intervention (RTI) systems, I was convinced that a serious statewide effort should be taken to implement RTI. However, I also had a front row seat to some very disappointing internal politics. It convinced me to begin the process of running for Wisconsin State Superintendent, which I did in 2017. Unfortunately, the effort was not successful. However, it made me keenly aware of opportunities for moving the needle on educational programming. As a statewide leader, I've had a number of opportunities to support and counsel school psychologists in this role, and it appears to be one that can have an impact, but one needs to be ready for a long-term struggle toward efficacy. I think it's been very interesting to watch the recent media push with regard to evidence-based literacy instruction. We know that in many parts of the country, elementary reading instruction is guided not by scientific understanding but rather by poorly informed opinion. It's been interesting to watch parents get involved in this discussion. In my experience running for statewide elected office, it was often the parents who resonated with my messages about inadequate educational programming. So, to me, the most single most powerful way to disseminate evidence and to ensure that it's being used is to involve parents. They can bring to bear pressure like no one else on school systems.

Brown also describes relationships as key to the implementation and evaluation of cutting edge practices:

I would be remiss if I also didn't mention the importance of relationships. There are people who are so helpful that when they ask you to try something, you really want to, even if you don't completely understand what it means, yet. Building positive, trusting relationships with colleagues is essential to both supporting them to use evidence-based practice, and to evaluating the success of your efforts!

### **Evidence Is a Cornerstone of Their Work**

It may not be surprising that a common thread among these current-day hyphens is that their work is grounded in MTSS. The scientist-practitioner model emphasizes the ongoing evaluation of helping efforts to ensure measurable improvements; thus, school psychologists are expected to evaluate their helping efforts and make adjustments. Hyphens meet this expectation especially well. Hyphens select practices that are supported by rigorous evidence but then ensure that those practices are installed in front-line settings in ways that the desired results can be obtained (Kratochwill et al., 2008; Sanetti & Collier-Meek, 2019). Contributors referenced MTSS as their framework for engaging in evidence-based practice with systems, whether it involved directing professional development or building software (Ysseldyke et al., 2006).

Muyskens has worked in software application development for 20 years. In his most recent work serving as the product manager of Spring Math, Muyskens described his role as "working with software developers, subject matter experts, business analysts, and end users to build Spring Math," which is grounded in evidence. He wrote,

Without evidence of its effectiveness, Spring Math could not and should not be adopted by schools. We are constantly collecting data on all aspects of the tool and its use including student outcome data, assessment accuracy and usage. The nice thing about working on a technology project is there is never any shortage of data.

Muyskens role involves coordinating efforts among people who often have competing interests to produce a tool that is both profitable (so it can be made available commercially) and effective. Muyskens uses evidence as the arbiter for product development decisions.

Wright described the importance of not only remaining current with empirical studies and supplying credible information sources but also evaluating outcomes. The increased open access to data has enabled school psychologists to evaluate these outcomes. Wright stated,

Like any consultant or trainer, I make an effort continually to monitor journals and other reputable information sources to identify emerging “best MTSS practices” to incorporate into my presentations. But I find it equally important to cultivate a variety of data sources within schools that can provide reliable evidence to judge those systems’ relative success in adopting such best practices. Toward this goal, of course, I help schools to collect and interpret the standard data streams used universally in MTSS, such as school-wide academic screeners (MTSS for academics) and rates of Office Disciplinary Referrals (MTSS for behavior).

### **Hyphens Are Leaders**

Working in leadership roles at an organizational, state, or national level creates opportunities to fundamentally change systems in a way that is guided by research. Leadership roles may provide opportunities to remove ineffective practices and promote those programs and practices that have an evidence base, which requires problem-solving and prioritizing resources. Heifetz’s (1994) definition of adaptive leadership is especially relevant here and is a cornerstone of the work of the National Implementation Research Network (NIRN). Heifetz defined adaptive leadership as leader actions taken when the steps needed to solve a problem are not already clear at the outset but instead have to be tried out and informed by ongoing effort and data on effects in an iterative fashion. Because such iterative problem-solving is a cornerstone of MTSS, hyphen leaders must function less as technical managers and more like adaptive leaders. Being an adaptive leader requires building trust and credibility, knowing the key actions of an effort and how to install and support them, and having the ability to iteratively adjust an effort in response to ongoing data collection. Good technical managers are not sufficient to support a change effort. As noted by the NIRN,

When systems undergo change, the natural tendency of those in the system is to look to those in authority to minimize the tension of change and regain stability. However, when change is the goal, formal authority can get in the way of leadership because it is designed to maintain systems, not to help people overcome their natural tendencies to maintain the status quo. When organizations and systems are being changed on purpose, adaptive leadership is needed to manage the change process.

In fact, the field of implementation science has emerged in direct response to the reality that knowing what to do (i.e., selecting an evidence-based practice) is not the same as getting that thing done (i.e., adaptively leading). Because hyphen school psychologists live in the space between science and practice, they understand the nuance of implementation. Hyphens routinely use the skills and tools like those built and promoted by the NIRN to make implementation the focus of their work (e.g., <http://nirn.fpg.unc.edu/learn-implementation/implementation-drivers>).

Humphries stated,

Some people may say that funding is a serious limitation, but in my experience as a Superintendent, once I got rid of all the “stuff” that wasn’t making an impact, I had plenty of money. I provided multiple days of paid training in the summer for my teachers. I brought in nationally recognized experts in English Language Arts and Math. I purchased curriculum supplements and modified assessment systems. I spent tens of thousands of dollars

on materials and books that would not have been possible had I not trimmed the budget in the other areas. If people are interested in getting something done, they will find away. Budgets are about priorities.

In school psychology, many contingencies can compete effectively with implementing effective practices in schools and classrooms, and yet, implementation of effective practices requires adaptive leadership to cultivate enabling implementation contexts (Witt, VanDerHeyden, & Gilbertson, 2004; VanDerHeyden, 2018).

## The Unique Opportunity of Front-Line Research and Practice

School psychologists who wish to work in hyphen roles might consider the common features of hyphen work identified by contributors to this chapter:

- Be a problem-solver. Respond to a real need that will improve the lives of children and families. Technology may be helpful to you.
- Access, critically evaluate, and deliver evidence-based information. Help make evidence-based information accessible to teachers, parents, educational leaders, and policymakers.
- Make use of the wealth of data collected routinely in schools to evaluate local implementation efforts that have been identified from the research world as potentially useful to solve a real problem in a system.
- Find mentors and cultivate relationships that will help you gain important skills and find environments in which your work can be effective and productive. Cultivate relationships to shift practice environments in ways that foster productive work.
- Be a leader who uses evidence of effects as the arbiter or selector of helping actions.

Hyphens have a unique vantage point from which to identify the evidence-based implementation accelerators and barriers in systems. First, ease-of-use and accessibility are essential features of solutions if the end goal is full implementation. Technology was identified as a game-changer accelerator for installing and sustaining effective practices in schools. Awareness of key influencers (parents and policymakers) and prioritizing effective practices are other implementation accelerators. Hyphens find easy ways to “deliver the punchline first” (Brown’s words) and make the critical piece of information salient to the decision makers who must engage in the next action to advance system and student outcomes. Hyphens have a unique role to improve the utility of data for consumers—both in improving what data are reported and then in delivering those data in ways that make the needed action apparent to teachers and school leaders.

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