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FOCUS on Research

Newsletter of the Division for Research (CEC-DR)



President's Message

Thomas W. Farmer, University of Pittsburgh

Welcome to a new academic year. In my first message as president of the Division for Research, I want to begin with two concepts that not only are central to our

field but are also currently of high visibility and interest in both research and popular culture. The first concept is open science and transparency, and the second is diversity and respect for differences.

With regard to open science, there has been a push to make research data available to others and to foster verification and replication in an effort to strengthen our confidence that when we say something works, we can expect it to work. Yet, along with data transparency, we must welcome another form of openness in the scientific process—a willingness to consider ideas and approaches that may be outside of or counter to current thinking.

We must be willing to accept that in some cases there might not be fast and hard truths that always work out the same. It is conceivable that we could conduct five replications of an intervention, with two trials showing a positive impact, two showing a negative impact, and one showing no impact, without a clear pattern for the differences. The point is that in the social sciencesand particularly in special education-the phenomena we focus on are dynamic, depend on many factors, and are often influenced by changing contexts. What works probabilistically in the general population may not be relevant or impactful for a particular student in a particular setting. Fortunately, special education is the science of individualized data-driven intervention. Our research questions not only focus on whether something works but also on figuring out how we move from what we know works in general to adapting this knowledge

to specific settings with specific resources, needs, and constraints to promote the success of a particular child.

This brings us to our second concept—diversity and a respect for differences. For special education, it is in our diversity that we find sameness in our community. That is, we may work with different students who have different needs, and we can get to the same or equally desirable outcomes in different ways. We can learn from each other not only by sharing data but also by sharing our different ways of using data to address specific needs and circumstances. This is where partnerships between researchers and practitioners are critical. We need to have clear channels of communication that respect differences and diversity in our approaches as we collectively work for innovation and adaptive dynamic services that are responsive to the needs of the students we serve.

In future messages I hope to continue a dialogue about how we can foster effective partnerships between the practice and research communities. I would also like to hear from you, both practitioners and researchers, about your processes of using data and the evidence-based practices you use to adapt services to promote meaningful outcomes and positive growth in the lives of our students. Please feel free to contact me at *tfarmer@pitt.edu*.

Have a wonderful start to the new school year!

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Diversity Spotlight

DR's Diversity Committee has selected the following paper for this issue's Diversity Spotlight.

King, M. T., Merrin, G. J., Espelage, D. L., Grant, N. J., & Bub, K. L., Suicidality and intersectionality among students identifying as nonheterosexual and with a disability. *Exceptional Children*, 84(2), 141–158.

The purpose of the current study was to examine students with and without disabilities and those identifying as LGBQ (lesbian, gay, bisexual, or questioning) regarding their reporting of peer victimization, school connectedness, and suicidal ideation. The findings suggest that students identifying with a disability or as LGBQ reported higher levels of suicidal ideation than their peers without either identity. "School connectedness and peer victimization each moderated the association between identity and suicidal ideation. In addition, students who were victimized more than their peers and who identified both with a disability and as LGBQ (n=250) reported the highest levels of suicidal ideation" (p. 141). Beyond its purpose, the strength of this study highlights the importance of including participants in special education research from traditionally marginalized backgrounds, examining students' multiple identities, and using a theoretical framework that is sensitive to complex contextual issues (i.e., issues of equity, culture, language, and learning). Research centered on LGBQ youth with disabilities and utilizing a minority stress framework (Meyer, Schwartz, & Frost, 2008) as the theoretical buttress revealed that the combination of marginalized identities can result in additional levels of stress.

Open Access to Research

Bryan G. Cook, Victoria VanUitert, & William J. Therrien, *University of Virginia*

Open science is an umbrella terms that refers to practices aiming to make all stages of science more open and transparent. Although some have argued that open science can make research more trustworthy, impactful, and efficient in special education (Cook, Lloyd, Mellor, Nosek, & Therrien, 2018), there is a lack of clarity in the field about what open-science practices are, their primary benefits and potential obstacles, and how to access resources for implementing them. To help inform the special education research community, we are featuring a series of short articles in the Division for Research newsletter on prominent open science practices. In this article, we discuss arguably the best-known aspect of open science: open access.

Why Open Access?

A primary purpose for research in special education is to inform and improve practice and policy as well as future research. For research to have its intended and full effect, practitioners, policy makers, and other researchers must be able to access to it. Unfortunately, most research published in professional journals is behind a paywall and can only be accessed freely by those who are affiliated with a university or other professional organization with a subscription. Those without such access have to pay to access research content. For example, if a practitioner wanted to access articles from Teaching Exceptional Children on an evidence-based practice she was considering using, and she did not belong to CEC and was not a student at university with a subscription, she would have to pay \$36 to access each article of interest. The potential benefit of research is not realized if practitioners, policy makers, and researchers (e.g., researchers in developing countries) cannot access it because they do not have free access and cannot pay for all of the articles in which they are interested.

What Is Open Access?

Tennant and colleagues (2016) defined *open access* as scholarship that is freely available "to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself" (p. 4). In other words, open access involves providing access to scholarship to anyone on the internet free of charge.

There are multiple types of open access. *Gold open access* refers to journals that make all articles freely available. Many gold open-access journals charge fees to authors in order to cover costs associated with publishing in the journals. For example, the standard article processing charge for *AERA Open*, a gold open-access journal in education, is \$700 USD (though currently that fee is less during the introductory time period, and is reduced for AERA members and graduate students; see *https://us.sagepub.com/en-us/nam/aera-open/journal202293#submission-guidelines*). Some gold

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open-access journals do not charge authors to publish in them (e.g., *Education Policy Analysis Archives*).

A hybrid model is becoming prevalent in special education journals, in which the default is for articles to be behind a paywall, but specific articles are made freely accessible either by the journal or by authors paying a fee. For example, authors can make their article in *The Journal of Special Education*, the DR member-benefit journal, freely accessible to all for \$3,000 USD, which is the standard fee for journals published by Sage (see https://us.sagepub.com/en-us/nam/sage-choice).

Green open access allows authors to post or selfarchive a version of their article on a personal website or open-access repository. Preprints are one option for making scholarship accessible via green open access, which we will explore in more detail in our next article in this series. Policies regarding what version of an article can be posted, where it can be posted, and when it can be posted vary by publisher and journal. For example, many journals allow for posting of non-formatted versions of accepted articles (or preprints) and formatted versions of articles after an embargo period (e.g., 12 months).

Primary Benefits and Potential Obstacles

As noted previously, open access provides multiple advantages to research consumers (e.g., free access to more research) and researchers (e.g., increasing the audience who accesses and potentially applies their research). Indeed, multiple studies have documented an open-access advantage, in which open-access articles are cited more frequently and have a stronger social media presence than traditional publications (McKiernan et al., 2016; Piwowar et al., 2018). Figure 1, by Danny Kingsley and Sarah Brown, summarizes the potential benefits of open access for different stakeholders.

The primary disadvantages or obstacles to making articles open access are cost, scarcity of outlets, and lack of knowledge. Open access "is still underutilized in education research: The majority of high-ranked education journals are not available via [open access], and Green [open access] archiving practices are neither widespread nor well understood" (Roehrig, Soper, Cox, & Colvin, 2018, p. 466–467). There are few gold open-access journals in education, and none of the highly ranked journals in special education are gold open access. Although hybrid options for making publications freely accessible are now available in many special education journals,



Figure 1. Benefits of open access.

cost can be prohibitive. Some researchers are able to cover these costs through grant funding or support from their institutions. Moreover, some journals allow for articles to be made open access if required by certain funding agencies. Researchers should also take care to avoid "predatory" journals that publish research for a fee but do not adhere to scientific or ethical standards.

Resources

- Roehrig et al. (2018) provide an excellent overview of open access specific to education journals. We also recommend Piwowar et al. (2018) and Tennant et al. (2016), both of which are published in open access journals, for general discussion of open access.
- See *https://doaj.org* for a directory of open access journals.
- Journal policies regarding open access can be searched at *http://sherpa.ac.uk/romeo/index.php*, and can generally be found on journal and publisher websites.
- The wikipage *http://oad.simmons.edu/oadwiki/ Main_Page* provides links to many resources about open access, including blogs and FAQs.
- See *https://openscience.com/green-gold-gratis-and-libre-open-access-brief-overview-for-beginners/* for an overview of gold, green, hybrid, and other types of open access.

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- Foster Open Science provides a free online course in open access at *https://www.fosteropenscience.eu/ learning/open-access-publishing/#/id/ 5a326071c2af651d1e3b1c14.*
- Unpaywall has harvested open access content and made it searchable at *https://unpaywall.org* (see Else, 2018).

For more information and resources on open access see the open-access section of the Scholarly Publishing and Academic Resources Coalition's (SPARC) website at *https://sparcopen.org/open-access/*.

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Getting to Know Your New DR President

Dr. Thomas Farmer is the new DR president. Let's get to know him.

Q: How long have you been a member of DR?

A: Since 1993 with a few lapses (remember to keep your dues up to date!)

Q: What is your area of research?

A: The development, prevention, and treatment of emotional and behavioral disorders; classroom and social dynamics management; the social integration of students with disabilities in general education classrooms; and bullying risk and prevention

Q: What grant work are you most proud of/believe to be most impactful?

A: The development of directed consultation as a framework for supporting rural teachers in the use of evidence-based practices (EBPs) to be responsive to the unique circumstances, resources, and ecology of rural schools and the needs of diverse learners

Q: What is something you still would like to accomplish professionally?

A: The development of analytic and progress monitoring approaches aimed at tailoring EBPs to individual students and ecologies (i.e., refocusing intervention to center on the person-in-context); linking developmental processes to key practice elements of EBPs to enhance the impact of intervention on key outcomes of students with disabilities

Q: What is the biggest change in the field of special education that you have observed in your career?

A: (1) Changes in service delivery from specialized/ segregated services to inclusive services in general education settings; and (2) shifting from categorical to response-to-intervention approaches to service delivery

Q: What are your goals for DR?

A: Continue efforts to strengthen linkages between research and practice; increase the membership of practitioners in DR; identify ways that research can be more responsive to the issues that are viewed as most relevant or important to stakeholders (i.e., students with disabilities, parents, teachers, administrators, and community partners).

Q: What do you do for fun/balance in your life?

A: Running and listening to music



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