Message from the President

The Single Case Experiment: A Design Study on Steroids?

“No one asks how to motivate a baby. A baby naturally explores everything it can get at, unless restraining forces have already been at work. And this tendency doesn't die out, it's wiped out.”

Do you recognize this quote? It may surprise some readers to learn that this statement was made by B.F. Skinner (1948). Given the intense vilification of behavioral theory among some educational researchers, too few researchers today adequately, let alone deeply, understand behaviorism, Skinner’s contributions, and the considerable impact behavioral theory can have on teaching and learning when used thoughtfully and in concert with other theories. Similarly, few know that one reason Skinner became involved in research on learning among children was a visit to his daughter’s math class. He left with several concerns, including noting that some students struggled and failed to complete problems, whereas others finished quickly but really didn’t learn anything new. This was one of the experiences that led Skinner (1972) later to conclude “A failure is not always a mistake, it may simply be the best one can do under the circumstances. The real mistake is to stop trying” (p. 153). Concern about the negative impact too much failure can have on learners, something now well established in educational psychology research, was one driving force for his work.

Among the many legacies behavioral researchers have given and continue to give the field is single subject design, now known as single case design... a powerful, yet underutilized, experimental research method in education.”

Among the many legacies behavioral researchers have given and continue to give the field is single subject design, now known as single case design, or single case intervention research design and analysis (these names, however, are misleading, as single case research typically involves multiple participants, with the performance of each single participant closely examined for cause and effect). The Institute of Education Sciences, which was instrumental in the new name for this approach, has developed guidelines as well as professional training for researchers, including a 2015 Single-Case Design Summer Training Institute. Although current legislation requires scientific evidence for educational practices, too few educational researchers, including educational psychologists, understand this method and the advantages it has for causal analyses in teaching and learning (Plavnick & Ferreri, 2013). On the other hand, most of us are familiar with the design study (Brown, 1992). As an intervention researcher, I deeply respect the concept of the design study and the contribution this research method has made to our field. Iterative, intervention, and theory-oriented design studies have made important contributions to the development of effective approaches to teaching and learning, allowing researchers to look not only at what works, but “how, when, and why it works” (Cobb et al., 2003, p. 13). Complex learning ecologies and how they influence teaching and learning can be examined. Design studies, however, are typically not experimental studies.
Message from President, cont’d.

Single case design studies also clearly and strongly allow researchers to address complex learning ecologies; examine how, when, and why an intervention or approach to instruction or development works; and closely investigate individual differences associated with participants (Plavnick & Ferreri, 2013). They are, in addition, experimental studies that when done well have high internal validity and a clear path to external validity. This is one reason why I refer to single case design studies as “design studies on steroids.” As with any form of research, doing single case studies well is demanding and requires deep understanding and careful management. Here, I share only a few key characteristics and one example. As with all experimental research, investigators conducting single case studies use experimental manipulation to isolate the effects of independent variables on one or more observable and measurable dependent variables. As Plavnick and Ferreri noted, however, “An important benefit of SCED [Single Case Experimental Design] for the application of practices or interventions … is that the design allows for individual differences associated with participants: a feature noticeably missing from comparisons of outcomes between groups of participants” (p. 550). Further, this experimental research design also allows researchers to fine tune an intervention in important ways to meet student needs while maintaining the focus on cause and effect. These are additional reasons I refer to single case studies as “design studies on steroids.”

Finally, innovative, talented researchers have conducted single case studies to provide initial validation of an intervention and to substantiate cause and effect before engaging in group experimental studies (Plavnick & Ferreri, 2013). Others have combined single case design and experimental or qualitative methods within a single study or in a line of studies (cf. McKeown, 2012; Graham, Harris, & Zito, 2005). An example is the single case study our research team conducted last year, and how that study led to the randomized controlled trial (RCT) we are conducting this year.

Karen Harris
APA Division 15 President, 2014-2015

Division 15’s Inaugural Webinar

On March 13, Division 15 held its inaugural webinar (entitled "Navigating the Academic Writing Process") with Dr. Avi Kaplan and Dr. Anastasia Kitsantas as featured panelists. The event was a brilliant success, and a full recording may be found here for those who weren't able to attend.

A special thanks to event Co-Chairs, Ellen Usher and Serena Shim, as well as the University of Kentucky tech department for its assistance. Be on the lookout for more online events in Division 15’s future!
INTERVIEWS WITH PAST PRESIDENTS

Dr. Martha Carr

APA Division 15 President, 2011-2012

Interview by Persis Driver, Christopher Biltz, and Revathy Kumar

Dr. Carr was the 55th President of APA Division 15 and has served the Division in multiple capacities over several years. She is currently the Aderhold Distinguished Professor of Educational Psychology, and Research Fellow, UGA Institute of Behavioral Research, at the University of Georgia. As part of our series on interviewing past presidents, we discussed the events leading to her presidency, her efforts and accomplishments during the presidency, and her vision for the future of the Division and our field.

Induction Into Division 15 Presidency

Prior to becoming the 15th President of APA Division 15, Dr. Carr had developed long-standing ties with multiple committees in the Division over several years. She particularly recalled her service as Chair of the Fellows Committee. In that position she championed the recruitment of a number of new members as Fellows, an ambitious goal for a small committee to accomplish. To realize this goal, she initiated a process of calling upon existing Fellows to nominate newer candidates. In this way she was able to leverage the power of numbers, since the Division had nearly a thousand members, and forms of mass communication such as e-mail to improve the efficiency of the selection process. This resulted in the committee receiving at least twenty nominations and almost half of those were selected as Fellows. She saw this initial three-year relationship with Division 15 as one of, “getting things done.” Presidency was a natural outcome of her consistent involvement with the Division and she expressed gratitude towards her colleague Paul Schutz and other members on the Executive Committee who supported and encouraged her to accept the position.

Addressing the Issues

Identity Issues
Talking about her years as Division 15 president, Dr. Carr spoke directly about three challenges that converged to influence the direction of her presidency. First, she emphasized the “identity issues” that were evident outside the educational psychology community because of a general lack of awareness about the very definition and role of educational psychology. “One of the problems is that they (colleges) are actually getting rid of the ed psych departments because people don’t know what it is and what it can contribute to education.” This lack of awareness posed a greater challenge to the Division because it was prevalent not only outside the community but also within Division 15’s members who were in the process of negotiating their own identities within the field.

In the discussion of the role of educational psychology in education, Dr. Carr stated that she saw educational psychology in a unique position to provide much needed information about cognition, motivation, and social influences on learning in general. She viewed the relationship between educational psychologists and other domain-specific researchers as being synergistic in that, “people working in math education or science education can talk about specifics like what is it to learn math, what are the problems in terms of learning mathematics or arithmetic, and we can look at how internal processes might affect the learning of math or science or literacy.” Focusing on memory processes, social influences such as the impact of teachers or parents on learning, and diverse motivational theories can provide a much broader theoretical and research lens that is
applicable to multiple learning domains. Her own work that looks at the influences and interactions of multiple psychological factors in the development of higher mathematical skills and understanding in children over time bears testament to this ideology.

As we continued our conversation, we addressed the role of educational psychology in educating teachers. Dr. Carr explained that to be able to make any meaningful impact on teacher preparation programs, academicians need to become skilled in “selling our products” to make people aware of what we do. Teachers do not learn about the research that is being conducted in the field of educational psychology or math or science or about how it is applied. Sometimes, even when they are aware of its application, evidence-based programs are not applied appropriately and this skews the positive results. Dr. Carr emphasized the need to communicate more effectively with teachers to gain greater buy-in and convince them to actually use these practices in their classrooms.

**Technological Advancement**

Second, Dr. Carr acknowledged that Division 15 was not taking advantage of newer models of technology used for dissemination such as online journals and innovative networking opportunities through websites, personal e-mails, Facebook, and other forms of social media.

Dr. Carr reflected on how she utilized these dynamic social forces to assist Division 15 in embracing a more progressive and inclusive identity. “People in educational psychology have always had ongoing common interests in terms of their research, yet what we were looking at is a different way to communicate. In the past someone would write a letter and get on the phone and now people communicate via Facebook and you have to deal with the latest way of communicating. The extent to which an organization is able to do that is the extent to which we are going to bring in these younger members.”

Guided by this philosophy, she decided to tackle the challenges posed by fast-paced technological changes and an ambiguous identity in what she viewed as the centerpiece of her presidency - creating a stronger social media presence for Division 15 and starting a process that ultimately led to the first Division 15 conference in Fairfax, Virginia in October 2014.

She took great pride in stating that “We were planning on hiring someone to probably be a publicist and work in social media. We didn’t really know what we wanted the person to do but we needed someone to do that work because it’s just too much work for someone like me, or anyone to do. So we hired Wade George to be our communications person and I ended up being involved in his hiring. He has done so much to change the make-up of our membership that we are actively increasing the number of people who are members of the division! We are getting younger people involved and I think hiring him and having someone in that role has made and continues to make a huge difference. Overseeing those changes and that growing change in membership has been a big change from when I started.”

Consistent with her message of improved communication ties with multiple constituencies, Dr. Carr viewed a large part of her presidency as devoted to educating the general population and the politicians about what educational psychology is and how it can contribute to academic and applied educational outcomes. “We have to educate the population and I think it’s not only ed psych, it’s true across the board in academia that you can’t stay in the ivory tower anymore.”

[Click Here to Continue Reading]
Division 15 EXECUTIVE COMMITTEE MEETING HIGHLIGHTS

February 11th, 2015
12:00pm – 2:15pm

Full minutes may be found here.

• The Executive Committee approved updated by-laws, which are posted on the Division 15 website.
• Using a grant from the Committee on Division/APA Relations, Division 15 will join six other divisions in creating a website to share science-based/evidence-based practices across areas of psychology. This site will include links to existing websites, new material that is science-based, and a blog space. Members interested in working on the grant should contact Karen Harris (karen.r.harris@asu.edu).
• The Committee discussed several proposals to increase student membership, and to recruit and support international members.
• The Division’s Policies and Procedures Manual will be updated to include a description of the duties of Members-at-Large. These include working on special projects developed by the President and serving as ex-officio members on committees.

Stay Connected and Never Miss a Beat

To ensure that you’re receiving the most from your membership, we encourage you to connect via the outlets below—each of which routinely shares unique content:

1 Weekly Digest: http://edpsych.us/theweeklydigest
2 Facebook: http://www.facebook.com/APADiv15
3 Twitter: http://twitter.com/apadivision15
4 LinkedIn: http://edpsych.us/D15linkedin
5 Google+: https://plus.google.com/+Apadiv15Org
6 The Job Board: www.edpsychjobs.info
7 The D15 PsychologyToday Blog: https://www.psychologytoday.com/blog/psyched-0

If you have difficulty accessing or connecting with any of the channels above—or if you'd like to see Division 15 share content via other outlets—please contact Wade George (wade.george@apadiv15.org).
ANNOUNCEMENTS

2015 E.L. Thorndike Recipient

The E. L. Thorndike Award Committee is very pleased to announce the selection of Michelene Chi as the 2015 recipient of the E. L. Thorndike Award for Career Achievement.

Dr. Chi, of the Mary Lou Fulton Teachers College at Arizona State University, has published over a hundred journal articles and book chapters on a range of subjects, including the promotion of student learning, student conceptual knowledge and beliefs, and different types of activity structures. Dr. Chi has received numerous awards for the creativity, diversity, and impact of her research—including the Sylvia Scribner Award from AERA's Division C (2013) and the Wickenden Award from the American Society for Engineering Education (2014).

Presidential Blog Series

Division 15 is pleased to present a special blog series published via its Psychology Today blog. Centered around President Karen Harris' presidential theme, “Impacting Education Pre-K to Gray," this series includes authorship from leading scholars such as Paul Kirschner, John Sweller, Dr. Carol McDonald Connor, Patricia A. Alexander and P. Karen Murphy.

A complete archive of posts (and more information on President Harris’ theme), may be found here.

Division 15 Social Reception at AERA

Division 15 welcomes members and friends attending AERA to join us for a social reception on Thursday, April 16, from 5pm - 7pm in Swissotel, Lucerne Level, Alpine II. We will honor all committee chairs and members at the social.
Dissertation Research Grants Available

Division 15 invites graduate students who are members or affiliates of the division to apply for a Dissertation Research Grant. The purpose of the grant is to provide financial support for educational psychology doctoral students preparing to collect their dissertation data. Two grants will be awarded, each including a $1,000 stipend to be applied toward the student’s dissertation research. Announcement of the grant award winners will be made during the APA convention. All applications must be submitted no later than May 1, 2015.

For a formal call and application instructions, please visit the Division 15 website, here.

Apply for an Early Career Grant!

Division 15’s Early Career Research Grants program is intended for early career professionals or researchers who are working in educational psychology and who are members of Division 15. The purpose of this grant is to provide financial support for research activities that might not be readily sponsored by one’s institution or other organizations. The grant provides a monetary award of $6,000 each for up to two selected applicants each year.

The deadline for 2015 applications is June 1, 2015. More information—including an official call and instructions for submitting—may be found here.

Educational Psychologist Tops the Rankings

We are pleased to announce that Educational Psychologist, the official journal of Division 15, has been ranked #1 of 51 educational and developmental psychology journals (SJR), and #2 out of 219 titles in the Education & Educational Research category (© 2014 Thomson Reuters). The 2013 impact factor was 4.844. Congratulations to our past and current Editors, Gale Sinatra and Clark Chinn, for their outstanding work leading to these impressive results.

Educational Psychologist publishes scholarly essays, reviews, critiques, and theoretical and conceptual articles that contribute to understanding issues, problems, and research concerning all aspects of educational psychology. Recent, highly cited articles have focused on topics ranging from urban legends in education (Paul Kirschner and colleagues), mindsets and resilience (David Yeager and his colleagues), and teacher education (Helen Patrick and colleagues) to multi-media learning (Richard Mayer and colleagues) and academic emotions (Reinhard Pekrun and colleagues).

Please consider Educational Psychologist as an outlet for your work (articles can be submitted here). Our incoming editor, Kathryn Wentzel, welcomes papers and Special Issue proposals on all topics pertaining to educational psychology, including those addressing current issues in cognition, motivation and self-regulation, social and emotional development, research and statistical methods, and philosophical debates as they relate to theory and educational practice.
RELEVANT PRACTICE IS THE SINCEREST FORM OF FLATTERY

A Review of Applications of Self-Regulated Learning across Diverse Disciplines - A Tribute to Barry J. Zimmerman

Applications of Self-Regulated Learning across Diverse Disciplines: A Tribute to Barry J. Zimmerman
By Héfer Bembenutty, Timothy J. Cleary, and Anastasia Kitsantas

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A common trait of great ideas is that they are often “hidden in plain sight.” They are unknown until discovery, at which point they become so painfully obvious that we cannot understand or even recognize our world without them. Barry Zimmerman’s theory of self-regulated learning (SRL) is one of these great ideas. This volume, entitled “Applications of Self-Regulated Learning across Diverse Disciplines” and edited by Héfer Bembenutty, Timothy Cleary, and Anastasia Kitsantas (2013), illustrates just how powerful Zimmerman’s theory is, and how it can be used to inform teaching and learning practice. At a time in which the processes and outcomes of education are under intense scrutiny, there is great need for a work, such as this one, that provides such comprehensive coverage of the theory, implementation, and effects of Zimmerman’s theory of SRL. This volume is essential reading for anyone who wishes to understand better how to help learners achieve both within and beyond disciplinary education.

The editors wrote that their goal for this tribute was to bring together, in one volume, the myriad of ways that individuals have used Zimmerman’s work to inform interventions designed to enhance learners’ domain-specific skills and capacities to proactively self-regulate their learning. As someone who conducts research on SRL, and like many of us who want to make a difference by helping learners increase their autonomy and success, I was chagrined to note that this volume is the first exhaustive review of SRL intervention work in over 10 years. Scholars in the field, and practitioners, need more frequent summative and translational work such as this to inform research and practice. This text’s critical contribution to the literature on applications of SRL research within disciplines is complimented by the volume’s clear message regarding the continuing generative nature of Zimmerman’s work. In short, Zimmerman’s theory, and the research that has grown out of it, has informed the SRL scholarly literature for over thirty years, and the wellspring shows no signs of being tapped dry.

Zimmerman’s work was a sea change for research into how to help learners succeed academically. Given evidence that learner knowledge of a strategy was not a reliable predictor of successful usage, Zimmerman introduced a number of key ideas regarding the metacognitive, motivational, and affective factors that influenced the likelihood and quality of strategy production. Again, what seems obvious now was not at all so until Zimmerman articulated it: learners’ thoughts, feelings, and beliefs play a role not only during learning performance, but also before and after it. By broadening the problem space to include forethought and self-
reflection, Zimmerman was able to illustrate how learning was cyclical, and that what learners thought, did, and inferred at one time affected those same processes at future times. As but one example, he articulated how the acquisition of SRL knowledge, skills, and abilities followed a developmental pattern that, if not honored, would often lead to learner frustration and maladaptive cycles of self-regulatory behaviors and cognition such as attrition and low self-efficacy. Subsequent research provided evidence supporting his claims, but a continuing challenge is how to translate this work into practice, particularly given the growing recognition that learning within domains often has uniquely specific and even situated aspects.

Each chapter in this volume serves as a model for translating theory into actionable pedagogy within numerous academic disciplines, and for various educational populations. Historical reviews that could very well serve as the foundation for an introductory course in modern learning theory, such as the chapters by Schunk and Usher as well as Chen and Rossi, are complemented by detailed discussions of the mechanics, effects, and future directions of interventions derived from Zimmerman’s work. For example, following the idea that SRL instruction is best conveyed within the learning context, there are chapters on fostering SRL development in mathematics (Pape et al.; Moylan), writing (Harris et al.), science (Cleary & Labuhn), high-stakes testing (Chen & Rossi), homework (Bembenutty), music (McPherson et al.), and physical education (Goudas et al.), among others.

In each chapter, the authors have illustrated how successful interventions create environments in which feedback is viewed positively; learning is seen as cyclical, developmental, and iterative; and where attributions are made to effort and practice rather than ability. Addressing a common criticism of education research, each chapter includes detailed descriptions of the procedures involved in each intervention, as well as the underlying scholarship that informed the design and execution of those procedures. These descriptions are supplemented and extended through the presentation of case studies that demonstrate the efficacy of the intervention. Chapters addressing challenges presented by the evolving affordances of the modern world, such as the use of course management systems (Kitsantas et al.), the increasing availability of human and non-human resources for help-seeking (Karabenick & Berger), and the proliferation of options regarding adaptive disease management (Clark), drew my attention to numerous areas for future research, informed by the direction set by Zimmerman’s work.
A single compendium of detailed descriptions regarding how to translate Zimmerman’s SRL theory into practice would, in itself, make a significant contribution. But as I was reading the volume what struck me was how well the chapters illuminated productive directions for future research. The authors took seriously the claim that academic disciplines have specific qualities that require the tailoring and tuning of scholarly work if learners are to truly achieve deep conceptual understanding. Yet, I was struck at how often this attention to domain-specificity was most evident in the performance phase of Zimmerman’s model. I continue to wonder to what degree the cognition, motivation, metacognition, and affect enacted in the forethought and self-reflection phases are domain general versus specific. This text provides numerous directions for investigating this issue. Likewise, a common theme among authors was recognition that the powerful force of self-efficacy extended not only to the domain, but also to SRL itself. Learners’ belief in their ability to successfully self-regulate would seem to be an important influence upon each phase of SRL, and deserves further attention. Affect, both as an influence and a target of self-regulation, remains an exciting area of continuing research that the authors helpfully explore. Finally, numerous authors identified the role of SRL in computer-based learning environments, both as a factor influencing efficacy as well as a target of those environments, as a direction for future work.

When I read an edited book regarding a particular theory, I want detailed descriptions of how the work has informed research and practice, and what promise remains unrealized in the model. This text by Bembenutty, Cleary, and Kitsantas admirably achieves these goals, and fills a critical translational research gap in the literature. After having read DiBenedetto and White’s chapter on mentoring, and learned how Zimmerman lived his work through his guidance and advising, I am not at all surprised that his students have produced a text that more than meets the goal of translating social cognitive perspectives of SRL into actionable and effective ways of directly helping learners achieve greater autonomy and success. This text has made clear how great ideas like Zimmerman’s focus on the cyclical nature of learning have broad applicability in diverse disciplines, even the discipline of developing researchers capable of continuing Zimmerman’s promising work. This volume serves as a model of how research can inform practice across numerous contexts, and how to honor those whose work is not only exemplary in its own right, but also fosters the exemplary work of others, as Zimmerman has done so well. I cannot imagine the field of SRL, or teaching and learning themselves, without the benefits and continuing promise of Zimmerman’s work.

**Don’t Forget Your Passport!**

Planning to attend APA 2015 in Toronto? Don’t forget you’ll need an active passport! To err on the side of caution, we recommend beginning that process no later than one month prior to the event. We look forward to seeing you there!