AERA SSRL SIG Celebrates Distinguished Members Recipients of Barry J. Zimmerman Award

Héfer Bembenutty

Barry J. Zimmerman

Awardees:

Dale H. Schunk

Philip H. Winne

Karen R. Harris

Roger Azevedo

Anastasia Kitsantas

Timothy J. Cleary
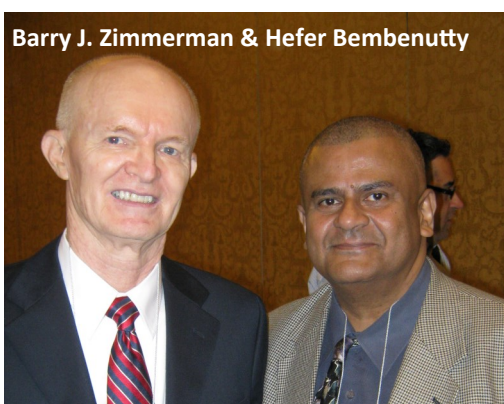
Impossible Dreams: Self-Regulated Learning

Héfer Bembenutty

All humankind dream to reach impossible dreams, and self-regulated learning is a process that facilitates reaching for the stars. That is why the American Educational Research Association (AERA) Studying and Self-Regulated Learning (SSRL) Special Interest Group (SIG) instituted the Barry J. Zimmerman Award for Outstanding Contributions. The award honors "mid-career and senior scholars who have made significant contributions to the fields of studying and self-regulated learning research."

All six recipients of the award have a self-regulated learning research agenda with national and international scholarships. Self-regulated learning helped them reach their professional dreams. The award has been given every year since 2015, and the awardees are Dale H. Schunk, Philip H. Winne, Karen R. Harris, Roger Azevedo, Anastasia Kitsantas, and Timothy J. Cleary.

This special issue of the Times Magazine celebrates the contributions of the six awardees. We are obliged to Linda Bol for chairing the committee with candor during the past six years and to all SIG officers who contributed to the development and creation of the award.

The Times Magazine is a SSRL medium that helps all members reach their dreams; that is why it continues catching the hearts of researchers, educators, parents, and students with excellent reports, authoritative guidance, revealing metacognitive insights, cyclically and culturally proactive teaching methods, pluralistic approaches, glamorous cover pages, theoretical but practically-oriented guidance, and data-driven educational tips. With these principles in mind, we honor the six scholars who have received the SIG's Zimmerman Award.

The award is named after Barry J. Zimmerman. The SSRL SIG has the privilege of counting Zimmerman as one of the SIG founders, and this issue is also a tribute to him. Zimmerman has advanced the understanding, development, and research on self-regulated learning. We are indebted to him and have deep gratitude to him for expanding our knowledge of what constitutes learning, teaching, performing, and achieving.

Today, many K-12 students, college students, and teachers value what self-regulated learning is and are mastering its processes and skills. Zimmerman's humble disposition, unassuming nature, and unpretentious wisdom have influenced all of us interested in acquiring solid theoretical grounds to apply self-regulated research to practice in our schools, academic centers, institutions of higher education, and pluralistic societies and to reach for our dreams.

Barry J. Zimmerman is an insightful and incisive theorist, whose theoretical models, simplicity, and practicality have captivated the attention of many seeking to transform their curriculum and expand their frontiers in an academic direction previously unimagined. His impact outdoes academic forums, such as sport, health, music, and hypermedia-learning environments. His elegant research designs that focus on process rather than on outcomes; emphasis on self-efficacy belief as a nucleus of success and performance; and cyclical approach with forethought, performance, and self-reflection embedded in a skilled loop have earned the recognition by his peers as one of the top educational psychologists of the 21st century.

For this special issue, we invited the six awardees to answer the following three questions: (1) What does it mean to you to receive the Zimmerman Award? (2) What is one of your latest scientific, theoretical, pedagogical, or practical discoveries involving self-regulation of learning? and (3) What three pieces of advice can you give for graduate students?

We are grateful to Zimmerman, Schunk, Winne, Harris, Azevedo, Kitsantas, and Cleary for their distinguished theoretical, empirical, and practical contributions to basic research on self-regulated learning. Their intellectual and seminal contributions span a deep breadth of transformation and have opened our hearts "to dream the impossible dream, to fight the unbeatable foe, to bear with unbearable sorrow, to run where the brave dare not go. To right the unrightable wrong, to love pure and chaste from afar, to try when your arms are too weary, to reach the unreachable star."

As learners, educators, researchers, and practitioners, we now know that by emulating Schunk, Winne, Harris, Azevedo, Kitsantas, and Cleary's virtues, ethics, morals, ability to delay gratification, and respect and appreciation for all humankind, along with their passion for learning and researching self-regulated learning, we too can dream of reaching impossible dreams.

> "Self-regulation is not a mental ability or an academic performance skill; rather it is the self-directive process by which learners transform their mental abilities into academic skills. Learning is viewed as an activity that students do for themselves in a proactive way rather than as a covert event that happens to them in reaction to teaching. Self-regulation refers to self-generated thoughts, feelings, and behaviors that are oriented to attaining goals (Zimmerman, 2000). These learners are proactive in their efforts to learn because they are aware of their strengths and limitations and because they are guided by personally set goals and task-related strategies, such as using an arithmetic addition strategy to check the accuracy of solutions to subtraction problems."
> Barry J. Zimmerman (2002) Becoming a Self-Regulated Learner: An Overview, *Theory Into Practice, 41*(2), 64-70.
> https://doi.org/10.1207/s15430421tip4102_2

Barry J. Zimmerman & Hefer Bembenutty

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Thorndike Award Winner (2011): Barry J. Zimmerman

Theresa A. Thorkildsen

https://www.aera.net/Portals/38/docs/SIGs/SIG121/SIG%20121%20Fall%202011.pdf

The Educational Psychology Division of the American Psychological Association (Division 15) proudly offers the Thorndike Award to celebrate the careers of individuals whose achievements exemplify the highest standards in the field of Educational Psychology. Members of the Division are excited to announce that Dr. Barry Zimmerman is the 2011 recipient of this award. We have all benefitted from his original, scientific, empirically-based research that contributes significantly to knowledge, theory, and practice in Educational Psychology. Members of the Special Interest Group on Studying and Self-Regulated Learning will not be surprised by this delightful news, but we thought it would be fun to learn more about how Dr. Zimmerman views his own career and reasons for doing the work he does. Here are some of his answers to questions about his career achievements.

What would you say was a guiding question or theme that directs your work?

I was motivated by the question, "How do learners acquire the self-efficacy beliefs and self-regulatory strategies and skills to achieve their potential?" From the outset of my career, I sought to develop a psychology that enables students to better attain their goals in life. I have used the term empowerment to describe this perspective.

What would you say were among the most interesting studies you conducted in your career?

To enhance students' sense of empowerment, I conducted numerous intervention studies, seeing this as the "gold standard" for demonstrating the impact of self-regulated learning. Two studies marked distinctive phases of my career. In the first, Ted Rosenthal and I (Zimmerman & Rosenthal, 1974) demonstrated that young children could learn developmentally advanced concepts, such as Piagetian conservation beliefs, from abstract social modeling. At the time, these concepts were thought to be resistant to systematic instruction. Ted and I concluded in a Psychological

Bulletin (1974) article and a book entitled Social Learning and Cognition (1978) that these concepts could be learned precociously from social learning methods of instruction.

A key study marking the second part of my career was conducted with Anastasia Kitsantas (1999). That work focuses on students' development of the self-regulation of writing. Writing is a demanding test of self-regulation because it is conducted in solitary settings, requires personal time management, and extends for long periods of time -- often without feedback or support. In addition to noting the positive impact of social modeling on writing revision strategies, our study demonstrated the power of setting process and outcome goals. This intervention study also showed increases in other self-regulatory processes and beliefs, such as self-efficacy, attributions to personal control, and valuing writing outcomes. This study was instrumental as I developed a cyclical model of self-regulation (Zimmerman, 2000).

What factors in your career surprised you most?

I was greatly surprised at the receptivity of the faculty and staff at a prestigious medical school to the use of self-regulatory methods for assisting mothers of young children with asthma. Although I had no prior experience with this disease, I was invited to comment on and participate in revisions in their asthma education program. Subsequently, I was appointed to a leadership position in the American Thoracic Society. I spent more than a decade applying self-regulation training to this form of disease management.

What would you say was the best part of working as a Professor?

I particularly enjoyed working with doctoral students and seeing them develop positive self-efficacy beliefs and self-regulatory skills to conduct research on their own.

Do you have advice on how individuals can stay responsive to local needs while

also paying attention to global changes in research?

To remain responsive to local needs, I have conducted intervention studies, especially with at-risk populations. Two quick examples: My asthma management studies were conducted with low SES minority mothers whereas a recent study of math instruction was conducted with Low SES minority community college students who displayed enormous dropout problems.

What would you like to see done to extend your work in the future?

I am interested especially in the role of practice when learning difficult musical skills. Like writing, learning a musical skill, such as playing a violin, requires long hours of deliberate practice, and self-regulatory training should have a major impact. I have co-authored two chapters on this topic with Gary McPherson, and the prospects of further findings look promising, but more research is needed.

Upon request, selected publications are available from the author (thork@uic.edu).
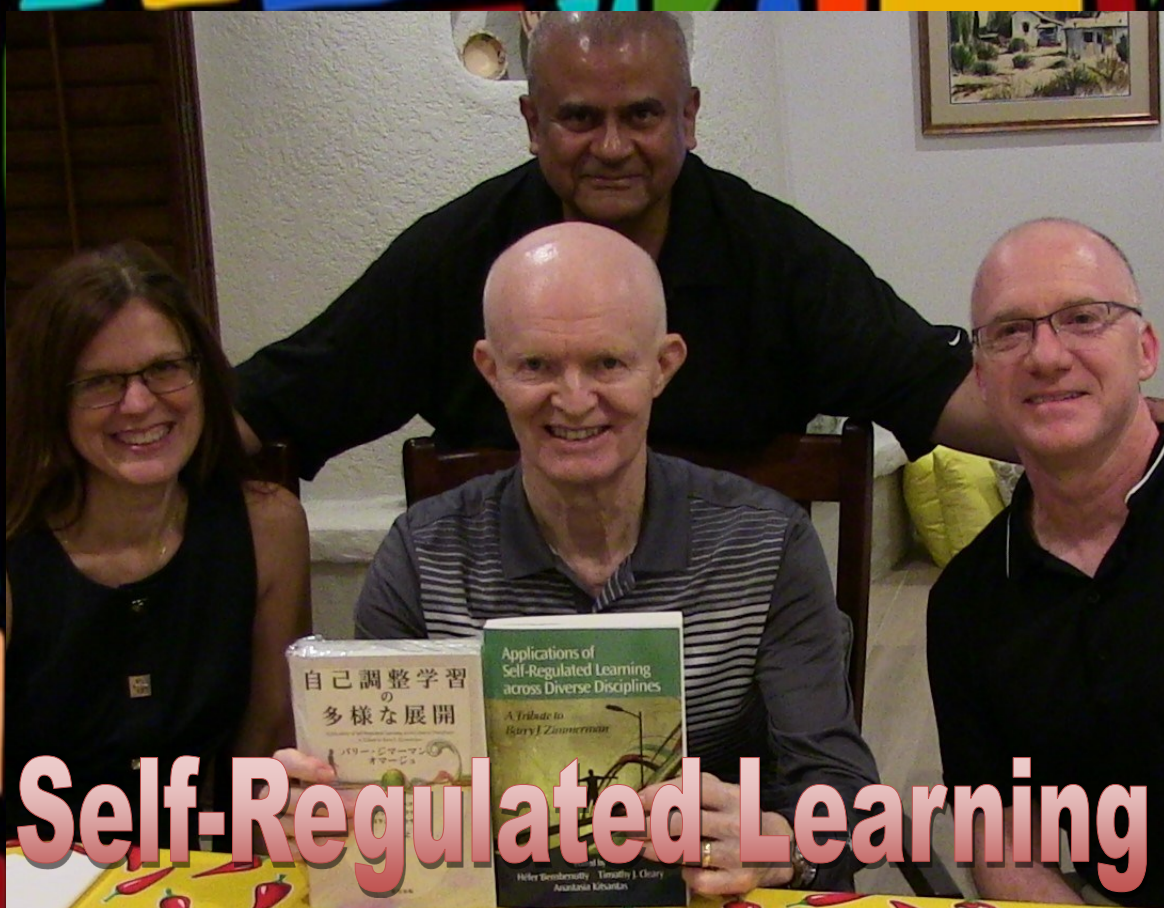

Barry J. Zimmerman

Theresa (Terri) Thorkildsen, PhD, is a professor of Education and Psychology at the University of Illinois at Chicago, and a former Chair of the Thorndike Award Committee. Thorkildsen's current research focuses on moral motivation, highlighting how individuals learn to participate in society. Guided by Intentional Systems Theory, Thorkildsen explores how children and adults participate in civil discourse, and how this type of engagement differs from personal and civic engagement. She has authored or edited five books as well as a range of journal articles, book chapters, and book reviews. She is a fellow of the American Psychological Association, Association for Psychological Science, and the American Educational Research Association.

Self-Regulated Learning

Barry J. Zimmerman, PhD, is an emeritus educational researcher at the City University of New York where he held the Title of Distinguished Professor of Educational Psychology. He has written scholarly publications on learning and motivation, many describing his research and theories on self-regulated learning.

"Self-regulated students focus on how they activate, alter, and sustain specific learning practices in social as well as solitary contexts."

Forethought Phase

"There are two major classes of forethought phase processes: task analysis and self-motivation. Task analysis involves goal setting and strategic planning. There is considerable evidence of increased academic success by learners who set specific proximal goals for themselves, such as memorizing a word list for a spelling test, and by learners who plan to use spelling strategies, such as segmenting words into syllables.

Self-motivation stems from students' beliefs about learning, such as self-efficacy beliefs about having the personal capability to learn and outcome expectations about personal consequences of learning (Bandura, 1997). For example, students who feel self-efficacious about learning to divide fractions and expect to use this knowledge to pass a college entrance exam are more motivated to learn in a self-regulated fashion. Intrinsic interest refers to the students' valuing of the task skill for its own merits, and learning goal orientation refers to valuing the process of learning for its own merits. Students who find the subject matter of history, for example, interesting and enjoy increasing their mastery of it are more motivated to learn in a self-regulated fashion."

Performance Phase

"Performance phase processes fall into two major classes: self-control and self-observation. Self-control refers to the deployment of specific methods or strategies that were selected during the forethought phase. Among the key types of self-control methods that have been studied to date are the use of imagery, self-instruction, attention focusing, and task strategies. For example, in learning the Spanish word pan for 'bread,' an English-speaking girl could form an image of a bread pan or self-instruct using the phrase 'bread pan.' She could also locate her place of study away from distracting noises so she could control her attention better. For a task-strategy, she could group the Spanish word pan with associated words for foods.

Self-observation refers to self-recording personal events or self-experimentation to find out the cause of these events. For example, students are often asked to self-record their time use to make them aware of how much time they spend studying. A boy may notice that when he studied alone, he finished his homework more quickly than when studying with a friend. To test this hypothesis, the boy could conduct a self-experiment in which he studied parallel lessons alone and in the presence of his friend to see whether his friend was an asset or a liability. Self-monitoring, a covert form of self-observation, refers to one's cognitive tracking of personal functioning, such as the frequency of failing to capitalize words when writing an essay."

Self-Reflection Phase

"There are two major classes of self-reflection phase processes: self-judgment and self-reaction. One form of self-judgment, self-evaluation, refers to comparisons of self-observed performances against some standard, such as one's prior performance, another person's performance, or an absolute standard of performance. Another form of self-judgment involves causal attribution, which refers to beliefs about the cause of one's errors or successes, such as a score on a mathematics test. Attributing a poor score to limitations in fixed ability can be very damaging motivationally because it implies that efforts to improve on a future test will not be effective. In contrast, attributing a poor math score to controllable processes, such as the use of the wrong solution strategy, will sustain motivation because it implies that a different strategy may lead to success.

One form of self-reaction involves feelings of self-satisfaction and positive affect regarding one's performance. Increases in self-satisfaction enhance motivation, whereas decreases in self-satisfaction undermine further efforts to learn (Schunk, 2001). Self-reactions also take the form of adaptive/defensive responses. Defensive reactions refer to efforts to protect one's self-image by withdrawing or avoiding opportunities to learn and perform, such as dropping a course or being absent for a test. In contrast, adaptive reactions refer to adjustments designed to increase the effectiveness of one's method of learning, such as discarding or modifying an ineffective learning strategy."

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64- 70. https://doi.org/10.1207/s15430421tip4102_2

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Linda Bol, PhD, is a Professor in Educational Foundations and Leadership, with a program emphasis in educational psychology and program evaluation, at Old Dominion University. Bol teaches graduate courses in theories of learning, metacognition, research methods, program evaluation, formative assessment, and dissertation seminar. She maintains an active research agenda in self-regulated learning in classroom settings. One area of specialization centers on students' calibration accuracy and strategies employed to improve the accuracy of these metacognitive judgments.

A Great Honor:

Chairing the Barry J. Zimmerman Award Committee

Linda Bol

In 2014, the American Educational Research Association (AERA) Studying and Self-Regulated Learning (SSRL) Special Interest Group (SIG) established the Barry J. Zimmerman Award for Outstanding Contributions. When my friend and colleague and Chair of the SIG, Dr. Timothy Cleary, asked me to chair the committee, I could not have felt more honored. I am honored for several reasons, most importantly, because of my respect, admiration, and gratitude toward Dr. Barry J. Zimmerman.

Zimmerman is among the most prolific and prominent figures in the fields of studying and self-regulated learning and is an AERA fellow. He is also one of the founders of the SSRL SIG. His seminal work on self-regulated learning represents a cornerstone of my work and the work of so many others. These

others include my doctoral students who often rely on Zimmerman's theory to frame their research. Many of our members have been Dr. Zimmerman's students. His influence and legacy remain palpable in the interactions, context, and direction of scholarship associated with our SIG.

The role of the committee chair was an honor for more personal reasons as well. Although Dr. Zimmerman was not my formal mentor, he mentored me, nonetheless. He not only inspired my work but expressed interest in my research and offered sage advice for improvement. He wrote letters of recommendation for my promotions. Clearly, I am not the only recipient of such support and kindness among members of our SIG.

The past recipients of this award embody the spirit and qualifications for this award. It was established to honor mid-career and senior scholars who

have made significant contributions to the fields of studying and self-regulated learning research. They have developed a programmatic research area with a strong theoretical, empirical, and applied impact on the field.

The recipients of the award undoubtedly meet these criteria. They have remained active in our SIG and serve as mentors to more junior members, many of whom are their doctoral students.

The inaugural Zimmerman award was bestowed to Dale H. Schunk in 2015. This was such a fitting tribute because Schunk and Zimmerman were close friends and collaborators who published seminal papers together. The second recipient was Philip Winne, another giant in our field, who continues to inspire us and support our SIG. His theory of SRL was published with Allyson Hadwin and has many conceptual parallels with Zimmerman's theory.

Karen Harris (2017) was the third winner of this award. She developed a model of strategy instruction that relied on Zimmerman's early publications. Roger Azevedo was the fourth recipient of the award. Much of his work extends the research on SRL to computer-based learning environments and diverse contexts.

Two award winners were Zimmerman's students. Anastasia Kitsantas conducted some of the early innovative research on SRL in sports with Zimmerman. Tim Cleary also published with Zimmerman and used his theory to frame his research and a recent book on applying SRL in classroom settings.

Both Kitsantas and Cleary have been past officers in our SIG. Now we have come full circle in the sense that the individual who significantly contributed to creating the award in honor of his mentor was the 2020 recipient of the award.

My favorite part of each AERA meeting was bestowing the award to my colleagues and friends, with whom I have interacted for decades. It is a privilege to announce this award and have my photo taken with esteemed leaders in the SRL field. But I did not do it alone.

My committee members have included well-respected past and potentially future award winners like Philip Winne, Karen Harris, Jeffrey Greene, Anastasia Kitsantas, and Allyson Hadwin. My resignation from the committee is bittersweet, but I need to step down and share the joy and excitement that comes with heading the committee and bestowing the award.

The Barry J. Zimmerman Award is More Than an Award

Dale H. Schunk

At the 1982 AERA Conference in New York City, I was doing a poster session. There were many posters in the main room. Along with a few others, my poster was in an adjoining room —a corner of a large ballroom. Most people went into the main room; a few wandered into where I was. I was feeling bored and lonely!

At the far end of the ballroom, I saw a man enter. He came over my way. I was hoping he would stop at my poster. When he reached me, he introduced himself. Thus began a long collaboration and friendship with Barry Zimmerman. Flash forward several years. When I learned that I was the inaugural winner of the SSRL SIG Zimmerman Award, I recalled this scene. And then I thought about what this award meant. Thus, the Zimmerman Award is more than an award.

What does receiving the Barry J. Zimmerman Award mean to you?

The Zimmerman Award is more than an award because it brings with it a challenge to live up to the high

D ale H. Schunk is an educational psychologist, former Dean and current professor in the School of Education at the University of North Carolina at Greensboro. He has researched the effects of social and instructional variables on cognition, learning, self-regulation and motivation. Schunk has served on the editorial boards of journals such as *Contemporary Educational Psychology* and *Educational Psychology Review*, and has authored many journal articles and book chapters on educational psychology. In addition to other books, he is author of the widely used textbook, *Learning Theories: An Educational Perspective*, and coauthor of *Motivation in Education: Theory Research and Applications.*

standards of the person for whom it is named. Barry Zimmerman is a first-in-the-field scholar, whose impact on self-regulation (and educational psychology more generally) is vast and growing. Earning this award meant that I had done some noteworthy things that would make him proud. However, more importantly, it set a challenge for me to continue to improve and make as great a contribution as I could, developing and advancing the field of self-regulated learning in
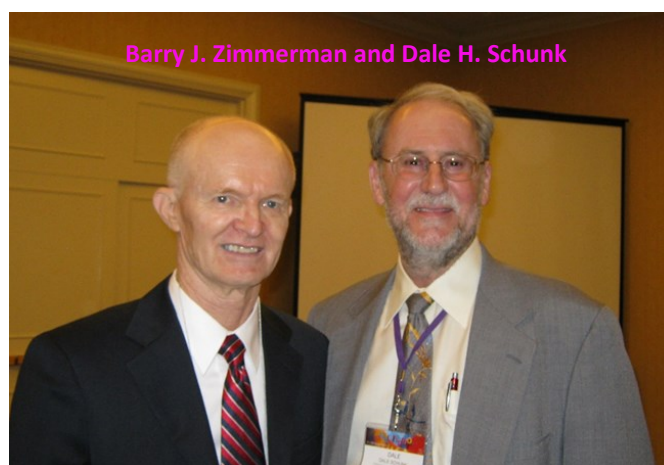
Barry J. Zimmerman and Dale H. Schunk

education. This is not an award you win and then retire. It is an award you win and then keep striving to do your best.

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning?

Much of my research career has involved exploring the role of self-efficacy, especially its role as a motivational variable in contexts involving learning. Research by me and many others has shown that self-efficacy can be affected by instructional and social-cultural conditions, and it can lead to changes in motivational outcomes such as choice, effort, persistence, and achievement. We also know that it is intimately linked with SRL.

We know less about the operation of self-efficacy in achievement contexts, but it is complex. There is no automatic effect, for example, of self-efficacy sources on resulting self-efficacy. A current theoretical/conceptual effort of mine is developing empirically-based adaptations to self-efficacy theory in light of contextual complexities. Moreover, with the increase in SRL research and more-elaborate technologies, I also am re-examining self-efficacy predictions with respect to SRL.

What three pieces of advice can you give for graduate students?

One is to *stick with the winners!* Introduce yourself to successful people, and maintain contact with them. They are the models you want to emulate. In my case, staying in contact with Barry Zimmerman led to extensive collaboration and long-lasting friendships. He also was a mentor for me. I trusted his guidance and wisdom, and that trust never failed me. At the same time, our collaboration aided his scholarly thinking. I like to believe that we had mutual benefits for one another.

Second, *practice what you preach*. This is the SSRL SIG. We research self-regulation and teach it, but those things mean more when we exhibit self-regulation in our lives. As the saying goes, actions speak louder than words. It means little if we espouse goal-setting, self-monitoring, strategic thinking, maintaining motivation, and the like, but do not practice them in our lives.

Third, *regularly engage in long-term planning* for what you want to do and what you want to be. This is difficult but crucial. It is easy to get caught up in day-to-day activities and have little time or energy for thinking beyond the present. Schedule periods of "think time." These will help you to set not only future goals (one of which might be to win the Zimmerman Award!) but also prioritize your present ones.

Longitudinal "N = Me" Program of Personal Research and Advice to Graduate Students

Philip H. Winne

What does receiving the Zimmerman Award mean to you?

During my doctoral program, I had the amazingly good fortune to meet and discuss research with many renowned scholars, including Al Bandura, David Berliner, Lee Cronbach, Nate Gage, Rich Shavelson, Lee Shulman, and Dick Snow. At that time, research on learning strategies was a "hot topic," and, owing to my mentors, I conceptualized learners as decision-makers engaged in developing and testing strategies for learning on their terms. Although the label did not emerge until later, I had early visions of learners as decision-makers engaged in self-regulated learning. The puzzles about how to model SRL and identify and gather data to test those models took my thinking captive.

I experienced exceptional honor as a nominee and a recipient of the American Educational Research Association (AERA) Studying and Self-Regulated Learning (SSRL) Special Interest Group's (SIG) Barry J. Zimmerman Award for Outstanding Contributions. Given Barry Zimmerman's stature and the friendship we share, the Zimmerman award is special. But even more rewarding and, for me, the most significant aspect of this very special accolade is what it says about progress toward solving puzzles that have hypnotized me for decades. I am delighted that these puzzles are just a bit less puzzling.

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning? Please describe it.

I believe one of the most important outcomes of my recent work is a collection of arguments that urge caution about recommending learning skills to learners and identifying conditions for regulating learning skills, even when data are gathered in a randomized controlled trial (Winne, 2017). What I recommend instead is leveraging modern learning technologies (Winne, 2020a; Winne et al., 2019) and careful reasoning (Winne, 2020b) to develop big data and tools that help each learner carry out a longitudinal "*N* = me" program of personal research. Rather than teach learners skills for SRL, I think we should help learners pull themselves up by their bootstraps.

What three pieces of advice can you give for graduate students?

First, my "new ideas" almost always originated in an idea I already had that was unsatisfying, missing a key ingredient or seemingly (maybe totally!) wrong. Sometimes, I scratch these "intellectual irritations" just by thinking about them. But so much more often, I make progress when I stumble across someone else's account of a quite different problem that, in an unpredictable way, I can relate to the problem that has been agitating me. So, I recommend: Read widely. A straightforward strategic inquiry is undeniably important. However, serendipitously discovered information could be intensely exciting and productive, too.

Second, I view the scholar's work of publishing as not my job. Yes, my salary, progress through the ranks, and, in important measure, success winning grant funding depends in no small degree on publications. Nevertheless, I do not consider the true value of a publication is realized until it seeds or sparks another publication, even if the follow-on work is critical. I see science as a progressive conversation, occasionally raucous. So, I recommend: Collaborate. Engaging intensely with colleagues widens the scope, challenges logic, improves products, and multiplies resources needed to publish. Collaboration also has another delightful result – you will develop dear friendships.

Third, my work with graduate student colleagues sometimes revealed "cracks" in my understanding of fundamental concepts. For example, some basic concepts I have come to "view differently" include random sampling from a population, processing levels, and confidence intervals. Rather than brush these aside because they were so well established, I dug into them. Eventually, I published articles that I am proud to describe as "rather controversial" (e.g., Winne, 1983, 2017, 2018). My recommendation: Be open to questioning even the most well-established claims. Sometimes "tiny cracks" need widening.

Upon request, selected publications are available from the author (winne@sfu.ca).

Philip H. Winne, PhD, is a Distinguished Simon Fraser University Professor of Education (https://www.sfu.ca/education/faculty-profiles/pwinne.html) and a Fellow of the Royal Society of Canada, AERA, APA, APS, and CPA. His scholarship spans theory, experimental work, research methodologies, and designing learning technologies to advance learning science and enrich self-regulated learning and metacognition in education.

Self-Regulated Strategy Development Instructional Model:
Barry J. Zimmerman and Advice for Graduate Students

Karen R. Harris

What does receiving the Zimmerman Award mean to you?

Barry J. Zimmerman was a founding member of the American Educational Research Association (AERA) Special Interest Group (SIG) Studying and Self-Regulated Learning (SSRL). He is a worldwide leader in theoretical, intervention, and assessment foundations in self-regulated learning (SRL). The work he and his colleagues have done has influenced my research with colleagues for decades. It was an honor to receive this award named for him.

While Zimmerman (1989) developed a social cognitive model of the development of self-regulation, and Self-Regulated Strategy Development (SRSD) is an instructional model, both clearly place the development of SRL as central in learning. Zimmerman's work has also been a major foundation for emphasizing the importance and development of self-efficacy in SRSD instruction. A critical and explicit goal in SRSD for writing is the development of self-efficacy and attributions for successful writing to effort and strategy use. The work of Zimmerman and his colleagues has been a significant foundation for this aspect of SRSD.

Zimmerman and Risemberg (1997) developed a seminal model of the development of a self-regulated writer. They argued that the roles of social, motivational, cognitive, and behavioral processes were critical to the development of SRL and developing as a writer. Their writing model further buttressed the need to address affect, behavior, cognition, and social interactions in the development and understanding of SRSD (Harris & Graham, 2018). The synergy between Zimmerman

K aren R. Harris is an educational psychologist and special educator who has researched the development of learning strategies and self-regulation among students with learning challenges such as learning disabilities as well as typically achieving students. She is currently the Mary Emily Warner Professor (a chair she shares with Steve Graham) in the Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College at Arizona State University.

and his colleagues' work and initial and ongoing SRSD research is clear (Harris et al., 2013). Thank you, Barry.

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning? Please describe it.

For the past decade, my teams and I have researched practice-based professional development (PBPD) for SRSD among general and special education teachers. Randomized controlled trials, quasi-experimental, and qualitative studies have shown that teachers and students' outcomes have been significant and meaningful (cf. McKeown et al., 2019).

Teachers also need the supports for learning offered in SRSD, including a supportive learning environment, collaboration with peers and PBPD leaders, addressing social-emotional strengths and challenges, and the development of a learning community. In the past few years, I have also been involved in a research program, led by Dr. Kay Wijekumar at Texas A&M University, on developing an online *tutor* for SRSD instruction in writing that enhances differentiation of goals and instruction in classwide, teacher-led SRSD instruction.

So far, our results indicate that teachers who receive PBPD for SRSD and use the tutor have higher student outcomes across measures than teachers who receive PBPD for SRSD for writing. Both groups outperform business as usual. In addition, my research teams and I have been involved in research at the elementary grades for SRSD instruction in close reading strategies for reading to learn, followed by writing to inform or persuade. From 1st grade forward, these young students are making large gains. I am hopeful that we will continue all of this research and address larger scaling up of SRSD.

What three pieces of advice can you give for graduate students?

My first piece of advice is to study what matters to you, and that which addresses questions critical to you and the field. We are fortunate to be in a

field that allows us a great deal of control over the focus of our work. Read broadly, collaborate with others, and keep learning across the decades to come. New approaches to research that depend upon interdisciplinary teams and complexity science concepts are on the horizon. These approaches have great potential to address wicked problems such as poverty, racism, and other forms of oppression (Harris, 2018). Your generation is crucial to the future of education and our field.

My second piece of advice is that you *can* do it all, just not all at the same time! In the years ahead, you will have many opportunities. Use all that you know about self-regulated learning and performance as you go forward. Keep your priorities and goals clearly in sight across teaching, service, and research.

Learn to say "no" when you are already fully committed. In terms of your research and writing, try to stay in a cycle where one paper is being written or submitted, one work is in process, and you are planning another. My final piece of advice, one given to me when I was an Assistant Professor, is simple: have fun every day.

Upon request, selected publications are available from the author (karen.r.harris@asu.edu)

"This award means more to me than I can easily put into words. When I began my master's program at University of Nebraska–Lincoln in Educational Psychology in 1975, Barry had been a faculty member for 5 years and was producing distinguished and impactful work that I followed. When I began my doctorate in Special Education with an Assistantship in Educational Psychology at Auburn University in 1978, he was one of the leading researchers in the field, and a clear leader in work on self-regulation and the social cognitive view of learning. I had the chance to meet him and begin correspondence with him later in the 80s. His work on self-regulated learning had a substantial impact on my development of the Self-Regulated Strategies Development (SRSD) instructional model..."
https://www.aera.net/Portals/38/docs/SIGs/SIG121/AERA.%20SIG.%20%20SSRL.Summer.2017.Newsletter.pdf?

Barry J. Zimmerman Award:

Multimodal SRL Process Data and Advice to Graduate Students

Roger Azevedo

Roger Azevedo, PhD, is a Professor in the Department of Learning Sciences and Educational Research at the University of Central Florida. His main research area includes examining the role of cognitive, metacognitive, affective, and motivational self-regulatory processes during learning with advanced learning technologies (e.g., intelligent tutoring systems, hypermedia, multimedia, simulations, serious games, immersive virtual learning environments). He was the former editor of the *Metacognition and Learning* journal and has received numerous grants (e.g., from the National Science Foundation, Institute of Education Sciences, National Institutes of Health, and the Social Sciences and the Humanities Research Council of Canada, Natural and Sciences and Engineering Council of Canada, Canada Research Chairs). He is a fellow of the American Psychological Association and the recipient of the prestigious Early Faculty Career Award from the National Science Foundation.

What does receiving the Zimmerman Award mean to you?

It was a great honor to have received the Barry J. Zimmerman Award from the AERA SSRL SIG two years ago. I am truly touched by the SRL community's acknowledgment of our research in the SRL area. First, Barry Zimmerman is an SRL pioneer, and his work has been a paramount influence on our research in SRL with advanced learning technologies.

Second, I am humbled by the community's recognition of our research and the advances and contributions we have made to the field. Third, receiving this award is a reminder of the contributions made by past and current undergraduate and graduate students, postdoctoral fellows, national and internal research collaborators, and educational and industry partners we have had over the last 20+ years.

The contributions of SRL collaborators have been immeasurable in the conceptual, theoretical, methodological, and analytical advances in the field. Through their dedicated work, we have also been fortunate to translate our empirical work into designing, developing, and testing advanced learning technologies, including multimedia, hypermedia, intelligent tutoring systems, simulations, high-fidelity medical mannequins, and immersive virtual environments. Through these technologies, we are passionate about advancing our understanding of the science of learning to improve learning, problem-solving, reasoning, and conceptual understanding in service to students of all ages and enhance our capacity to address key issues impeding our society.

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning? Please describe it.

Our latest discovery and challenges focus on using multimodal SRL process data to increase our understanding of the underlying mechanisms that lead to better learning and performance. We are currently exploring methods to visualize various SRL processes and multimodal data (e.g., open learner models) available to researchers, teachers, and students embedded in immersive virtual learning environments to scaffold students' and teachers' metacognitive awareness by accessing their data for monitoring and regulating, which will be fed to artificial agents (e.g., intelligent virtual humans) to support and foster SRL.

The modeling of educational, psychological, computing, engineering, and statistical sciences is key to present and future SRL and AI advances. The future is bright! AI can significantly advance our field and research in SRL by providing a platform of tools, methods, analytical techniques, learning, teaching, and training with learning environments. Reciprocally, our field of SRL will also influence advances in the next generation of Artificial Intelligence.

What three pieces of advice can you give for graduate students?

There are several important pieces of advice that I would give graduate students. The first one is that they should find a great mentor. Find a faculty mentor who is devoted to you, supports your endeavors, and helps you navigate your way through the vastness of graduate school and beyond. This should be someone who will challenge you, encourage and motivate you, provide you with all the experiences that will make you successful, scaffold you as you traverse the muddy waters of graduate school and academia, and never completely fade their support. If you are not satisfied with the mentoring you are receiving, then find a better mentor. I know it is not easy, but it will pay off in the end! Believe me—I have done it!

Second, spend time exploring interdisciplinary research, concepts, constructs, techniques, analyses, and models. Immerse yourself in our vast field (or in my case, fields since we do interdisciplinary research), and allow yourself to develop an overview of the field, research topics, and history of the field and trends. Then, slowly but surely, start honing in on what you want to be your research niche.

It is also important to consider how the research you are conducting will benefit humanity—does it address human, economic, societal, training, education, workforce, or health issues? This is important since you should be (motivationally, affectively, and cognitively) driven by what you are studying—be passionate about what you are studying—it is contagious and extremely rewarding. At some point in your career, you will care about how you research impacts humanity!

Lastly, it would be best if you always were critical of your development, knowledge, skills, ideas, and progress. Make sure to reflect on your successes and especially your failures (these are the moments when we learn the most), and with a supportive mentor, you should always strive for self-improvement!

Upon request, selected publications are available from the author (roger.azevedo@ucf.edu)

Barry J. Zimmerman Award:
Mentoring, Scholarship, and Advice to Graduate Students

Anastasia Kitsantas

What does receiving the Barry J. Zimmerman Award mean to you?

I feel honored and grateful to be the recipient of this very special award for two reasons. First, Professor Zimmerman has been an amazing scholar, a fantastic mentor, and a wonderful role model, who maintained high standards for excellence. His positive encouragement, kindness, guidance, support, and collaboration for more than two decades are much appreciated as my mentor. I continue to aspire to become the kind of mentor and teacher he has been to many other students and me. Second, this award inspired me to continue my work in self-regulated learning across disciplines *with more vigor and passion.*

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning? Please describe it.

Over the last 24 years of my career in academia, my scholarship has focused on developing learner self-regulation across different domains of human functioning, including academics, athletics, and health. A compelling foundation of evidence suggests that self-regulated learning processes such as goal setting, strategic planning, self-monitoring, and self-evaluation are key malleable determinants of learner interest and performance. These processes, which can be taught irrespective of learner limitations and other environmental factors, have led to promising avenues for intervention efforts (Bembenutty, Cleary, & Kitsantas, 2013; Zimmerman & Kitsantas, 1999).

One of my latest contributions to intervention work has been geared towards science education contexts using citizen science programs, collaborative learning environments, and learning technologies to help students engage in self-regulatory behaviors and become more interested in the STEM areas. Some of these efforts have led to a co-edited book (Hiller & Kitsantas, 2019) targeting effective components of citizen science programs to enhance students' efficacy beliefs and interest to pursue STEM areas in the future .

Currently, along with other colleagues, other efforts are focused on fostering computational thinking with self-regulated learning. We aim to develop an online tool, the Science Practices Innovation Notebook (SPIN), to support high school students and teachers while collecting learning analytics.

Learning technologies can be very powerful tools in teaching content and supporting student self-regulated learning, as they allow learners to engage in conversational interactions and provide opportunities for performance feedback. Such tools also allow both students and instructors to track assignment progress and self-reflect on mastery of tasks and instructional approaches, respectively (Kitsantas & Dabbagh, 2010).

What three pieces of advice can you give for graduate students?

Communicate

Get to know your professors, talk to them after class, seek them out at campus events, and during office hours, engage them in discussions about their research and your ideas. Connect with your professors to explore funding avenues and open doors to career networking and job opportunities.

Collaborate

Collaborate with your professors. Seek out opportunities for collaboration throughout your graduate student career.

The best research takes place in teams, and having the experience to work with others is essential for pursuing a career in higher education.

Persevere

You can do it! Believe in yourself! Do you need some academic help? Talk to your professors, talk to your peers. Create realistic timelines for your projects and degree completion. Join a community of graduate students for support and in finding balance as a graduate student.

Upon request, selected publications are available from the author (akitsant@gmu.edu)

> **"Contrary to a commonly held belief, self-regulated learning is not asocial in nature and origin. Each self-regulatory process or belief, such as goal setting, strategy use, and self-evaluation, can be learned from instruction and modeling by parents, teachers, coaches, and peers. In fact, self-regulated students seek out help from others to improve their learning. What defines them as "self-regulated" is not their reliance on socially isolated methods of learning, but rather their personal initiative, perseverance, and adoptive skill."**

Anastasia Kitsantas, PhD, is a professor of Educational Psychology in the College of Education and Human Development at George Mason University. Her research interests focus on the role of self-regulation of learning and performance across diverse areas of human

Barry J. Zimmerman and Anastasia Kitsantas

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Barry J. Zimmerman Award:

Self-Regulated Learning and Advice to Graduate Students

Timothy J. Cleary

What does receiving the Zimmerman Award mean to you?

Receiving the 2020 American Educational Research Association (AERA) Studying and Self-Regulated Learning (SSRL) Special Interest Group's (SIG) Barry J. Zimmerman Award for Outstanding Contributions was a significant event for me both personally and professionally. I have known Dr. Zimmerman since 1995 during my time as a graduate student and have benefitted immensely from our collaborations and work together. In addition to being a legendary researcher, he was a kind and generous mentor and friend. To be forever linked with Dr. Zimmerman in this way is one of the most special and personally gratifying achievements.

It was also quite humbling to receive this award as all the prior recipients are widely recognized across the world as iconic scholars and researchers. It is gratifying to know that the review panel recognized that I have made some important contributions to SRL research and the broader educational field.

As my thinking as a professional has matured and become more nuanced and sophisticated regarding my research approach, I have found myself thinking about the "bigger pictures" and how my work can have broader impacts. Thus, this award is also of great importance to me as it validates that I am thinking about important ideas that are valued by my colleagues and society.

What is one of your latest scientific, theoretical, pedagogical or practical discoveries involving self-regulation of learning? Please describe it.

I also have submitted a manuscript for publication that details the results of a systematic review of SRL microanalysis (Cleary, Slemp, Reddy, Alperin, Lui, Cedar, & Austin, submitted). Based on this review, I can share two general findings. First, SRL microanalysis has been successfully applied across myriad contexts (e.g., academic, athletic, clinical), populations (e.g., K-12 populations, undergraduate, graduate school), and tasks or activities. Regarding tasks within the academic realm, SRL microanalysis has been used to assess SRL across reading, mathematics, writing tasks, test preparation, test-taking, and test grade reflections. Notably, there has been an upsurge of interest in using SRL microanalysis as a diagnostic or formative assessment tool; that is, to generate data that can be used to enhance decision making about instructional or intervention programming.

What three pieces of advice can you give for graduate students?

I have shared advice with the students in the SSRL SIG in various newsletters or communications over the past few years. Graduate school is typically a challenging yet enriching experience for most students. Committing to a field of study and embarking on a career dedicated to generating new knowledge that can positively impact society can be both an exciting and intimidating experience. With this issue in mind, I briefly offer a few pieces of advice.

First, take advantage of all the opportunities that graduate school provides. Very few times in life will you be around a group of experts and sophisticated thinkers who share the collective goal of enhancing the quality of your thinking and research skills. Thus, talk to as many professors as you can about research in general or perhaps their perspectives about topics of interest to you. Along a similar line, take as many statistics and research methods courses as you can so that you receive sufficient modeling and feedback about engaging in the very thing that will determine your career's success – being an independent, engaged researcher.

Second. as you go through graduate school, I encourage you to be mindful of topics and issues that "feel right" or resonate with you. Students may often get involved in a specific research area because their major advisor focuses on that area. That is a great start, but it is equally important to ask questions about who you are and what topics or issues matter to you. It is better to begin wrestling with some of these ideas while in graduate school.

Third, use personal experiences as a steppingstone. I have found that people often display great passion and motivation, and at times become outstanding advocates for specific topics or issues that are of great personal interest or meaning. To increase the chances of having a successful, sustainable, and personally gratifying career in academia, it is essential to commit to issues that strongly resonate and speak to you.

Upon request, selected publications are available from the author (timothy.cleary@gsapp.rutgers.edu)

Timothy J. Cleary is an associate professor in the Graduate School of Applied and Professional Psychology (GSAPP) at Rutgers University. Cleary devotes most of his time to conducting research on SRL and motivation-related intervention and assessment issues as well as emerging trends and professional issues among school-based practitioners and educators. He has secured several research grants to support his research initiatives and has consulted at a national and international level. Cleary serves on multiple editorial boards for top-tier journals, including The *Journal of Educational Psychology, Journal of School Psychology*, *Metacognition and Learning,* and the *Journal of Experimental Education*. He has also served in a leadership capacity for numerous years on the executive board of the Studying and Self-Regulated Learning (SSRL) Special Interest Group for AERA from 2008-2014.

Barry J. Zimmerman and Timothy J. Cleary

WHO WILL BE THE NEXT RECIPIENT OF THE BARRY J. ZIMMERMAN AWARD?

It could be you!
It could be your nominee!

Call for Nominations for the Barry J. Zimmerman Award for Outstanding Contributions

Anastasia Kitsantas
George Mason University & Chair of the Committee

Purpose and Description

This annual award has been established to honor mid-career and senior scholars who have made significant contributions to the fields of studying and self-regulated learning research. The focus of the award is to recognize a researcher who has developed a programmatic area of research that has made a strong theoretical, empirical, and applied impact on the field. Zimmerman is among the most prolific and important figures in the fields of studying and self-regulated learning and is an AERA fellow. He is also one of the founders of the Studying and Self-Regulated Learning SIG.

Eligibility and Nomination Process

This award is open to any researcher who has actively conducted research in studying and self-regulated learning for a sustained period (i.e., at least seven years) and has produced a strong record of scholarly achievement. Membership in AERA and the SSRL SIG are not criteria for this award, but we do anticipate that many of the nominations will come from the SIG and across AERA.

To nominate someone please provide the contact information for yourself and the nominee. The chair will contact and inform nominees about their nomination for the award and request confirmation of their acceptance of the nomination. If they accept the nomination, their names will be included in the pool of applicants to be reviewed by the committee.

After confirming his or her acceptance of the nomination, he or she will submit (a) full academic CV, (b) electronic copies of up to three peer-reviewed articles that the nominee perceives as most representative of his or her larger research program and scholarly contribution, and (c) a personal statement (no more than 500 words) detailing the key themes of his or her research agenda and overall impact on the field.

The nominator will also be asked to provide a letter of support (no more than 1,000 words) detailing the primary contributions and scholarly impact of the nominee on the field of self-regulated learning.

All nomination materials, including the nomination letter, the CV, the journal articles and the personal statement, must be submitted electronically to Anastasia Kitsantas (**akitsant@gmu.edu**) by **November 20**th.

Recognition

The winner of the Barry J. Zimmerman Award for Outstanding Contributions will be informed via email by March. The winner will be officially recognized at the SSRL SIG business meeting at AERA.

SEND THE APPLICATION TO ANASTASIA KITSANTAS (AKITSANT@GMU.EDU) BY NOVEMBER 20TH.