AERA SIG
Studying and Self-Regulated Learning

2022 Summer Newsletter

Self-regulated Learning Across the Lifespan

Editors
Kendall Hartley
Anna Brady

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Letter From the Chairs

Aubrey Whitehead & Abraham Flanigan

Virginia Military Institute & Georgia Southern University

Aubrey Whitehead

Abraham Flanigan

Hello, members of the Studying and Self-Regulated Learning SIG!

We hope this message finds you well and that you are having a restful summer season.

As you will see in the coming pages, our Summer 2022 Newsletter is chock-full of exciting and insightful research and information. For instance, you will read about the incredibly diverse research projects being undertaken by the members of our SIG's community and you will be treated to a review of Kenneth A. Kiewra's (2022) SOAR to College Success and Beyond textbook. You will also find summaries of—and citations for—recently published studies, chapters, and edited books that have been authored by members of our SIG. We are grateful to our enthusiastic and talented co-editors, Kendall Hartley (UNLV) and Anna Brady (Georgia Southern), for putting together such a wonderful newsletter for our readers!

Our summer newsletter comes on the heels of a successful 2022 AERA Annual Meeting for our organization. Our SIG's programming at AERA 2022 included three paper sessions, a poster session, a roundtable discussion, and a symposium. In total, 32 different projects were presented across these six sessions. We also had 35 people serve as submission reviewers (11 of which were graduate students)—and our successful AERA 2022 programming would not have been possible without them!

Now, we look to the future with much excitement and anticipation. Thanks to inputs from many members, we have identified some exciting (though admittedly ambitious) goals.

First, as mentioned months ago, we are committed to increasing membership, particularly amongst the grad student population. Thanks to our community and focus area, burgeoning researchers have a home to partner with experts in the field, while simultaneously presenting their research.

Further, we will continue to disseminate new self-reg research and highlight some of the accomplishments of our dedicated members through our different publications.

Finally, we are working on several initiatives to remember self-reg titans and shine a spotlight on up-and-coming researchers:

1. Several longstanding members (thanks Pam, Jill, Jenny, and Taylor) have been invited to record chats with self-reg folks about their recent research. To hear about the most up-to-date findings, these conversations will focus on their latest articles, books, and other publications.

2. To recognize the past with an eye toward to future, we will also look to partner with the Motivation SIG to hold a joint session at the 2023 AERA Conference to recall and reflect on the life and work of our recently-departed colleague, Dennis McInerney. With Dr. McInerney's interest and work in both the motivation and self-regulated learning realms, we hope to have a joint session that allows more members a chance to discuss their recent research in either area.

3. We're also considering a video series where junior faculty members conduct interviews with some well-known self-reg experts. Our goal is to capture the advice and comprehensive insights from some of our most esteemed colleagues.

We look forward to seeing as many of our members as possible in person in Chicago from April 13-16, 2023.

Here's to an exciting and productive year for SSRL SIG.

All the best,

Aubrey & Abe

Letter From the Editors

Kendall Hartley and Anna Brady

University of Nevada, Las Vegas and Georgia Southern University

It is our pleasure to introduce our first SSRL Newsletter as co-editors. The issue theme is the brainchild of Anna, who pointed out the remarkable diversity of self-regulated learning (SRL) research presented in San Diego. In a field noted for a heavy reliance on undergraduate students, our SIG can be commended for examining a wide breadth of contexts. In this issue, you will find research with four-year-olds (Stern & Hertel), middle schoolers (Kitsantas et al.), engineering students (Kryshko), and adults enrolled in a MOOC (Tang). Together, these studies highlight the application of SRL across the lifespan.

In this issue, we feature a book review by Deana Ford of the recent publication *SOAR to College Success and Beyond.* Deana's thoughtful review highlights the connection between SRL and *SOAR*.

We have also introduced a smattering of recent SIG member publications in this issue. If you are interested in sharing your work in the upcoming Fall newsletter, check out the information at the end of the section.

We are interested in your feedback regarding this and upcoming issues. Please feel free to reach out if you have suggestions for topics you would like to see included in future newsletters.

Kendall Hartley

Anna Brady

MATERNAL SCAFFOLDING STRATEGIES IN MOTHER-CHILD INTERACTIONS AND CHILD METACOGNITIVE STRATEGIES

Maren Stern and Silke Hertel

Heidelberg University

Sociocultural theory (Vygotsky, 1978) suggests that parents play a fundamental role in supporting children's self-regulatory abilities. Children gradually internalize their parents' co-regulatory strategies and develop self-regulatory abilities (Bernier et al., 2010). Especially, parents' *scaffolding behaviors* are related to children's self-regulatory abilities and task performance in problem-solving contexts (e.g., Erdmann et al., 2019; Pino-Pasternak & Whitebread, 2010; Zhang & Whitebread, 2017).

Maren Stern

However, the specific mechanisms by which parental scaffolding exerts its influence on children's strategic behaviors have been less systematically explored. The integrative scaffolding framework by van de Pol et al. (2010) states that the combination of scaffolding means with scaffolding intentions (e.g., support of children's cognitive or metacognitive activities) results in scaffolding strategies. So far, research on parental scaffolding has focused on single aspects rather than exploring scaffolding strategies more integrally. Therefore, this study examined how a set of scaffolding serves different scaffolding intentions, representing scaffolding strategies. We explored how mothers' scaffolding strategies (1) are associated with mother-child task performance and (2) predict children's metacognitive strategies and child-alone task performance.

Brief Methods

The sample included 132 mother-child dyads. The mothers ranged in age from 27 to 50 years (M=38.76, SD=4.40). The children (55% female) were four or five years old (M=4.80, SD=0.56). Participants were videotaped while working on the subtest triangles of Kaufmann's Assessment Battery for Children II (Melchers & Melchers, 2015). First, mother-child dyads solved the problem-solving tasks for 10 minutes, and then the children did the same tasks alone for 5 minutes. Mothers' scaffolding during mother-child interactions was coded with a high-inference rating scheme (Erdmann et al., 2019) assessing mothers' scaffolding means (e.g., questions, hints, explanations) and scaffolding intentions (i.e., cognitive, metacognitive, autonomy support). Children's metacognitive strategies during child-alone problem-solving were coded with a subscale of the Strategic Behavior Observation Scale (Dermitzaki et al., 2009). In addition, task performance was calculated separately for mother-child and child-alone solving as the number of solved tasks.

Silke Hertel

Results

Path model analyses reveal that mothers' metacognitive support was negatively – and autonomy support positively – linked to mother-child task performance. Mothers' scaffolding means served different scaffolding intentions, representing two scaffolding strategies: a compensatory (= more scaffolding means, more cognitive support, lower levels of children's metacognitive strategies) and an autonomy-supportive strategy (= fewer scaffolding means, more autonomy support, higher levels of children's metacognitive strategies). Children's metacognitive strategies, in turn, mediated the link between mothers' scaffolding intentions (autonomy and cognitive support) and child-alone task performance.

In summary, mothers' scaffolding behaviors contribute to children's metacognitive strategies when solving the tasks independently. Future research should address different aspects of scaffolding integrally and examine different scaffolding strategies. Since the children did not

directly internalize the mothers' strategies, further research is needed to understand the underlying mechanisms more deeply. For example, to investigate children's metacognitive processes, further approaches, such as neurophysiological methods, should be used. In our most recent study, we explore the neurophysiological processes involved in self-regulatory processes and the role of children's mindsets to gain a deeper insight into children's learning.

For detailed information, please see:

Stern, M., & Hertel, S. (2022). Relationship between maternal scaffolding and preschooler's metacognitive strategies in a problem-solving situation. *Learning and Instruction, 80*, 101631. https://doi.org/10.1016/j.learninstruc.2022.101631

References

Bernier, A., Carlson, S. M., & Whipple, N. (2010). From external regulation to self-regulation: Early parenting precursors of young children's executive functioning. *Child Development, 81*(1), 326–339. https://doi.org/10.1111/j.1467-8624.2009.01397.x

Dermitzaki, I., Leondari, A., & Goudas, M. (2009). Relations between young students' strategic behaviours, domain-specific self-concept, and performance in a problem-solving situation. *Learning and Instruction, 19*(2), 144–157. https://doi.org/10.1016/j.learninstruc.2008.03.002

Erdmann, K. A., Vetter, V. C., Schäferling, M., Reuner, G., & Hertel, S. (2019). "How do we solve this task?" - Parental scaffolding with full- and preterm toddlers. Zeitschrift für Entwicklungspsychologie und Pädagogische *Psychologie, 51*(3), 135–149. https://doi.org/10.1026/0049-8637/a000215

Melchers, P., & Melchers, M. (2015). *Kaufman Assessment Battery for Children-II (deutschsprachige Fassung der Originalversion von A & N Kaufman)*. Pearson.

Pino-Pasternak, D., & Whitebread, D. (2010). The role of parenting in children's self-regulated learning. *Educational Research Review, 5*(3), 220–242. https://doi.org/10.1016/j.edurev.2010.07.001

Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher–student interaction: A decade of research. *Educational Psychology Review, 22*(3), 271–296. https://doi.org/10.1007/s10648-010-9127-6

Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Harvard University Press.

Zhang, H., & Whitebread, D. (2017). Linking parental scaffolding with self-regulated learning in Chinese kindergarten children. *Learning and Instruction, 49*, 121–130. https://doi.org/10.1016/J.LEARNINSTRUC.2017.01.001

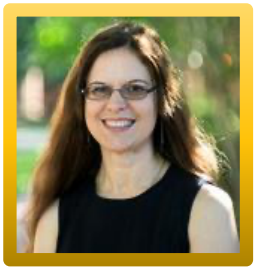
Student-Engaged Design: Helping Middle School Students Develop Learning How to Learn Skills

Anastasia Kitsantas[1], Shannon King[2], Roy Echeverria[3], Jerry Putt[3], Beth Hosek[1], Sahar Wahidi[1], Asuka Nuwere[1], Haley McKeen[1], Jack Belkin[1]

George Mason University[1], Battelle for Kids[2], Frederick County Public Schools[3]

The ability for students to regulate their own learning has critical implications for long-term academic success and achievement; thus, it is imperative that educators assist students in developing self-regulated learning (SRL) skills. Student-Engaged Design (SED) is a process that invites educators to consider ways to incorporate personal relevance, voice and choice, collaboration among peers, and opportunities to build student self-regulation and motivation while they design learning opportunities for students (Brown-Kramer, 2021; English & Kitsantas, 2013).

Middle school is a critical age period for students to learn how to manage their schedules and



Anastasia Kitsantas

Shannon King

course workload and become independent learners as they transition into high school. Students who do not possess these critical skills and learning strategies may experience reduced self-efficacy and an overall decline in motivation to succeed academically, placing students on a trajectory of decreased academic attainment in high school (Kitsantas & Clearly, 2016). Given the critical nature of middle school as a precursor to future academic success, the purpose of this study was to examine the function and utility of

a holistic "learning how to learn course" embedded into the school curriculum and implemented over the course of an academic year in a middle school. This SED course incorporated seven key components critical for effective learning — SRL, motivation, deep learning, curiosity, growth mindset, self-advocacy, and school connectedness — by engaging students in a variety of self-directed activities and projects scaffolded to ultimately build independent learners.

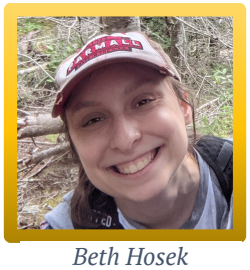
Fifteen selected middle school students (7th and 8th grade) of diverse socioeconomic backgrounds and achievement levels participated in semi-structured focus groups. Using a thematic analysis, students stated that the course was best described as an opportunity to engage in deep learning through inquiry-based projects that

Roy Echeverria

Jerry Putt

were both personally interesting to them as well as provided them with voice and choice. Students also indicated that teachers provided support and guidance with goal setting and planning, modeled strategy use and provided social feedback. Finally, students found value when teachers were intentional in planning lessons that promoted a growth mindset as well as encouraging students to self-advocate and create a sense of connectedness with their peers and the school community.

In regards to the utility of the course, students mentioned that they were very motivated and engaged to complete the projects they were working on by setting goals, using a variety of strategies, and self-reflecting on their learning.



Beth Hosek

Sahar Wahidi

The majority of students were able to transfer and use these skills learned in this course to other academic courses in which they were enrolled. Finally, students mentioned that this course also facilitated social-emotional development and provided opportunities for self-advocacy.

The findings of this study offer important insights for the development and implementation of such interventions that incorporate SRL and motivation principles and seek to cultivate student social-emotional competence and feelings of connectedness to the school while creating a learning environment in which students have a choice and voice. Providing students with opportunities to take ownership over their own learning as well as the skills and resources required to do so effectively boosts future academic motivation and attainment (Kitsantas & Cleary, 2016).

Asuka Nuwere

Haley McKeen

Jack Belkin

Acknowledgment and Disclaimer:

This material is based upon work supported by Battelle for Kids and the Chan-Zuckerberg Initiative [Grant Number #120621]. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the International Baccalaureate Organization.

References

Brown-Kramer, C. R. (2021). Improving students' study habits and course performance with a "Learning how to Learn" assignment. *Teaching of Psychology, 48*(1), 48-54. https://doi.org/10.1177/0098628320959926

English, M. & Kitsantas, A. (2013). Supporting student self-regulated learning in project based settings. *Interdisciplinary Journal of Problem Based Learning, 7*(2), 128-150. https://doi.org/10.7771/1541-5015.1339

Kitsantas, A., & Cleary, T. L. (2016). Development of self-regulation in secondary students: A social cognitive instructional perspective. In Wentzel, K., & Miele, D. (Eds). *Handbook in Motivation at School* (pp.169-187). Routledge.

EXPLORING MOTIVATIONAL REGULATION IN THE CONTEXT OF HIGHER EDUCATION

Olena Kryshko

University of Duisburg-Essen

Higher education poses an unavoidable necessity for self-regulated learning. To succeed academically, students need to monitor and control not only their cognition, behavior, and the learning context, but also their motivation. While motivational declines are generally common during the study process providing various potential occasions for regulation, it is conceivable that in these uncertain times of war and the continued COVID-19 crisis students may experience increased problems to stay motivated, which makes the importance of effective motivational regulation even more pronounced.

Olena Kryshko

In my PhD project, I explored the link between motivational regulation and academic success in German higher education. My first paper focused on students' use of different motivational regulation strategies (e.g., performance-approach self-talk, proximal goal setting), showing that a more frequent overall strategy use predicted higher academic performance and lower dropout intention (Kryshko et al., 2020). Noteworthy, this finding was robust regarding two independent samples (students enrolled in teacher training vs. civil engineering programs) and different operationalizations of performance (self-reported vs. actual grades). My second paper focused on motivational regulation in terms of students' personal beliefs in their capacity to effectively deal with motivational problems, i.e., self-efficacy for motivational regulation (Kryshko et al., 2022a). Across two studies with STEM undergraduates, self-efficacy for motivational regulation positively predicted two dimensions of academic satisfaction, even after controlling for other relevant predictors. My third paper, which I presented at this year's AERA meeting and which is currently under review, focused on the longitudinal associations between self-efficacy for motivational regulation, motivational regulation strategy use, and academic satisfaction in students majoring in different fields (Kryshko et al., 2022b). We conducted a four-wave study and used random intercept cross-lagged panel models to distinguish between-person associations (regarding stable interindividual differences) from within-person associations (regarding processes of intraindividual change) of the variables. At the between-person level, the two motivational regulation variables were positively associated with each other and with academic satisfaction. At the within-person level, an increase in self-efficacy for motivational regulation was associated with a subsequent decrease in the frequency of strategy use and a subsequent increase in academic satisfaction, while other cross-lagged effects were not statistically significant. Thus, between-person and within-person associations did not converge in terms of presence and sign of detected effects. These findings accentuate the utility of longitudinal designs and novel multi-level methods in correlational SRL-research.

In the future, I plan to develop a program aiming at the enhancement of students' self-efficacy for motivational regulation, based on different sources of self-efficacy (e.g., mastery experiences, modeling, verbal persuasion) proposed by Bandura. Implementing such a program in the university entry phase may help first-year students to better adjust to the demands of self-regulated learning in higher education.

References

Kryshko, O., Fleischer, J., Grunschel, C., & Leutner, D. (2022a). Self-efficacy for motivational regulation and satisfaction with academic studies in STEM undergraduates: The mediating role of study motivation. *Learning and Individual Differences, 93*. https://doi.org/10.1016/j.lindif.2021.102096

Kryshko, O., Fleischer, J., Grunschel, C., & Leutner, D. (2022b, April 21–26). *Self-efficacy for motivational regulation, motivational regulation strategies, and academic satisfaction: Exploring between-person and within-person associations* [Poster presentation]. American Educational Research Association (AERA) Annual Meeting, San Diego, CA, USA. https://doi.org/10.3102/IP.22.1889381

Kryshko, O., Fleischer, J., Waldeyer, J., Wirth, J., & Leutner, D. (2020). Do motivational regulation strategies contribute to university students' academic success? *Learning and Individual Differences, 82*. https://doi.org/10.1016/j.lindif.2020.101912

A Cultural Perspective of Self-Regulated Learner Profiles in MOOCs

Hengtao Tang

University of South Carolina

Learning in Massive Open Online Courses (MOOCs) requires learners to self-regulate their learning process or receive effective self-regulated learning (SRL) interventions to accomplish personal goals (Maldonado-Mahauadet al., 2018). Designing effective interventions requires understanding how online learners' SRL traces in MOOCs (Corrin, de Barba, & Bakharia, 2017). Particularly, a person-centered analysis of how self-regulated learners interact with MOOCs is needed. The person-centered approach assumes that participants differ in the manner that the variable (e.g., the use of self-regulated learning) influences the outcomes (e.g., performance, grades) and thereby assigns learners with similar profiles to the same cluster (Rothes, Lemos, & Gonçalves, 2017). This approach can thus portray online learners' SRL traits in MOOCs and provide granular implications on improving interventions to support specific subpopulations and to strengthen learner success in MOOCs (Khalil & Ebner, 2017).

In addition, an increasing need emerges for a culture responsive understanding of supporting SRL learners in MOOCs, especially given MOOCs learners' diverse cultural backgrounds (Kizilcece et al., 2017). Culture influences learner performance in different educational settings (Fang, et al., 2013), including SRL behaviors (Purdie & Hattie, 1996). Furthermore, learner behaviors in MOOCs, such as registration, participation, and completion, significantly differ by the culture to which learners are exposed (Kizilcece et al., 2013). Therefore, understanding the cultural differences between the subgroups of self-regulated learners is valuable for providing adaptive strategies to support global populations taking MOOCs (Kizilcec et al., 2017).

This research sought to use a person-centered approach to identify self-regulated learner profiles and then investigated whether learner performance and cultural dimensions differed between clusters. The research was conducted in an eight-week Canvas xMOOC on project management. Self-regulated learner profiles were identified based on behavioral traces recorded relevant to Zimmerman's (2000) social cognitive model of SRL. The matrix used to assess participants' cultural values among countries was Hofstede's six cross-cultural dimensions (1986). Using K-means clustering analysis, this research revealed four different self-regulated learner profiles: all-around SRL learners, disillusioned SRL learners, control-oriented SRL learners, and control-dominated SRL learners. In addition, all-around SRL learners outperformed the other three clusters in course grades. This research also identified cultural difference between those clusters.

Hengtao Tang

The practical implications of this research are threefold. First, SRL interventions cannot only attempt to increase the total frequency of SRL traces but also encourage learners to properly engage in each SRL phase. Second, this research pinpoints the need to offer SRL support with a focus on prompting learners to efficiently reflect their learning process in MOOCs. Particularly,

xMOOCs restrain the affordance for learners to perform SRL, especially limit their attendance to the forethought and the self-reflection phases. Third, this research reinforces the need to provide culturally adaptive interventions for online learners to succeed in MOOCs. For example, for learners completing a MOOC in individualist cultures and indulgence cultures, building a collective norm and reinforcing learner awareness of the norm in collaborative learning settings might be needed.

For detailed information, please see:

Tang, H. (2021). Person-centered analysis of self-regulated learner profiles in MOOCs: A cultural perspective. *Educational Technology Research and Development*, *69*(2), 1247-1269. https://doi.org/10.1007/s11423-021-09939-w

References

Corrin, L., de Barba, P. G., & Bakharia, A. (2017, March). *Using learning analytics to explore help-seeking learner profiles in MOOCs*. In Proceedings of the Seventh International Learning Analytics & Knowledge Conference (pp. 424-428). ACM.

Fang, Z., Grant, L. W., Xu, X., Stronge, J. H., & Ward, T. J. (2013). An international comparison investigating the relationship between national culture and student achievement. *Educational Assessment, Evaluation and Accountability, 25*(3), 159-177.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International journal of Intercultural Relations, 10,* 301-320. https://doi.org/10.1016/0147-1767(86)90015-5.

Khalil, M., & Ebner, M. (2017). Clustering patterns of engagement in Massive Open Online Courses (MOOCs): the use of learning analytics to reveal student categories. *Journal of Computing in Higher Education, 29*(1), 114-132.

Kizilcec, R. F., Pérez-Sanagustín, M., & Maldonado, J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education, 104*, 18-33.

Kizilcec, R. F., Piech, C., & Schneider, E. (2013). *Deconstructing disengagement: Analyzing learner subpopulations in massive open online courses*. Proceedings of the Third International Conference on Learning Analytics and Knowledge, LAK 2013, 170–179.

Maldonado-Mahauad, J., Pérez-Sanagustín, M., Kizilcec, R. F., Morales, N., & Munoz-Gama, J. (2018). Mining theory-based patterns from Big data: Identifying self-regulated learning strategies in Massive Open Online Courses. *Computers in Human Behavior, 80*, 179-196.

Purdie, N., & Hattie, J. (1996). Cultural differences in the use of strategies for self-regulated learning. *American Educational Research Journal, 33*(4), 845-871.

Rothes, A., Lemos, M. S., & Gonçalves, T. (2017). Motivational profiles of adult learners. *Adult Education Quarterly, 67*(1), 3-29.

Zimmerman B. J. (2000). Attaining self-regulation: A social cognitive perspective. In Boekaerts M., Pintrich P. R., Zeidner M. (Eds.), *Handbook of Self-regulation* (pp. 13–39). San Diego, CA: Academic Press.

SOAR to College Success and Beyond Book Review

Deana Ford

SOAR to College Success and Beyond is an excellent book for any college student, or anyone else for that matter, that wants to succeed at learning. SOAR to College Success and Beyond is easy to read, understand, and apply. The book emphasizes the importance of practice, strategies, motivation, a growth mindset, and life- and time-management skills as important conditions for learning. SOAR to College Success and Beyond explains what an effective and ineffective learner looks like, how learning and memory works from a theoretical and practical perspective, and provides multiple relatable analogies. The SOAR method involves selecting, organizing, associating, and regulating learning. Selecting important information from readings,

Deana Ford

lectures, PowerPoints, etc. are crucial for developing a complete set of notes. A complete set of notes contain titles, topics, details, context, qualifiers, and specific statements. The complete set of notes can then be organized. Organization takes place using graphic organizers. The graphic organizers can be hierarchies, which organizes information from top to bottom to show categories or groups,

sequences, which organizes information from left to right to show order, or matrices, which uses columns and rows to show comparisons and relationships. Further, the graphic organizers can be used to make meaningful internal and external associations. Multiple association strategies and examples are provided such as chunking information, drawing pictures, developing mnemonics, chaining stories, and creating pegwords; to name a few. However, learning information is not very helpful if students do not regulate what they know and don't know! Regulated learning and its importance are explained. Strategies that can be used to regulate learning, such as asking questions, preparing practice-test items, and test-taking, are all elaborated upon while also providing specific and explicit examples, suggestions, and guidance. Furthermore, SOAR to College Success and Beyond explains the difference between a fixed and growth mindset, provides examples and challenges the reader to extend a growth mindset to new situations. SOAR to College Success and Beyond also emphasizes the importance of motivation and life- and time-management by providing some inspiring stories and strategies for staying motivated and managing time.

Instructors may appreciate that the book presents a growth mindset and a sense of student responsibility. Students will learn how to make connections within and across content and into the real world. The SOAR method helps students learn how to 1) select important lesson ideas and take a complete set of notes, 2) use graphic organizers to organize their notes, 3) make associations to lesson ideas and prior knowledge, and 4) regulate their own learning and understanding of the content. SOAR can be applied to all subjects and concepts and makes learning simple, achievable, and fun. The strategies and tools provided in SOAR to College Success and Beyond are accompanied by extensive guides, examples, and practice scenarios encouraging the reader to apply the techniques and strategies discussed. Students can use the skills learned in the book to develop a deep understanding of the concepts in class as well as adopt a growth mindset. SOAR to College Success and Beyond also warns students about the dangers of the laptop and other mobile devices as distractors for learning. This book is a must for learners with self-regulation issues and could be used by instructors that often hear excuses from students.

For more information, please see:

Kiewra, K. A. (2022). *SOAR to college success and beyond.* San Diego: Cognella.

RECENT PUBLICATIONS FROM SIG MEMBERS:

Neuromyths in Education: Prevalence Among South Indian School Teachers

Sundaramoorthy Jeyavel[1,2], Vijyendra Pandey[1], Eslavath Rajkumar[1], Govindappa Lakshmana[1]

Central University of Karnataka[1], Central University of Punjab[2]

This study aimed to find out the existence of neuromyths among school teachers in the South Indian states. An online survey was carried out to assess the school teachers' general understanding of the brain and their belief on selected seven neuromyths statements. A total of 503 high school and higher secondary school teachers from South India participated in this study. On average, 65.5% of teachers have shown their belief toward more than two of the neuromyths; 84% of the participants have believed the learning style myths. This points out the difficulty of teachers in distinguishing factual information from non-scientific facts or myths. Therefore, there is an important need for involving interdisciplinary conversation that can reduce misunderstandings among teachers in the future.

Jeyavel, S., Pandey, V., Rajkumar, E., & Lakshmana, G. (2022). Neuromyths in Education: Prevalence Among South Indian School Teachers. *Frontiers in Educational Psychology.* https://doi.org/10.3389/feduc.2022.781735

Self-regulated learning as a complex dynamical system: Examining students' STEM learning in a simulation environment

Shan Li[1], Juan Zheng[1], Xudong Huang[2], Charles Xie[2]

McGill University[1], Institute for Future Intelligence[2]

Self-regulated learning (SRL) is essentially a complex dynamical system (CDS). However, no effort has been made to study SRL from a CDS approach in the context of science learning. In this study, we adopted the ideas and analytical techniques of complexity science to analyze SRL.

Specifically, 74 ninth-grade students were asked to undertake an engineering design task in a computer-simulated environment. We compared the differences in the complexity of the SRL process and the regularity of SRL behaviors between the high and low performers. We found that the SRL processes of the high performers were more complex than those of the low performers. In general, the low performers demonstrated a higher degree of repetition of SRL behaviors than the high performers. The low performers were also more likely to exhibit a behavior repeatedly than the high performers. This study extends the literature on the dynamics of SRL in both theoretical and methodological dimensions.

Li, S., Zheng, J., Huang, X., & Xie, C. (2022). Self-regulated learning as a complex dynamical system: Examining students' STEM learning in a simulation environment. *Learning and Individual Differences, 95,* 102144. https://doi.org/10.1016/j.lindif.2022.102144

Using Mixed Reality Simulation and Roleplay to Develop Preservice Teachers' Metacognitive Awareness

Sara E. Luke[1], Deana Ford[1], Michelle Vaughn[1], Angelica Fulchini-Scruggs[2]

Mercer University[1], University of Central Florida[2]

Scholars have advocated for practice-based experiences, including high-leverage practices and metacognition, to be incorporated within preservice teacher programs, as they have the most pervasive impact on students' learning. One way in which teacher preparation programs have incorporated practice-based experiences is through the use of simulations, including mixed reality simulations and roleplay. The purpose of this mixed methods study was to investigate the influence that mixed reality simulations and roleplay had on 14 preservice teachers' metacognitive awareness. Two groups of preservice teachers engaged in both mixed reality simulations and roleplay within the context of parent-teacher conferences. Quantitative data were obtained across three administrations of the Metacognitive Awareness Inventory for Teachers. The participants provided qualitative data by completing written reflections on four occasions. Separate analyses of quantitative and qualitative data were merged and compared. The results revealed that the mixed reality simulations and roleplay experiences significantly improved preservice teachers' metacognitive awareness. Furthermore, there were interesting differences between the perceptions of the preservice teachers regarding the difficulty and complexity of the mixed reality simulations and roleplay experiences.

Luke, S.E., Ford, D., Vaughn, M. & Fulchini-Scruggs, A. (2021). Using Mixed Reality Simulation and Roleplay to Develop Preservice Teachers' Metacognitive Awareness. *Journal of Technology and Teacher Education, 29*(3), 389-413. Waynesville, NC USA: Society for Information Technology & Teacher Education. Retrieved July 6, 2022 from https://www.learntechlib.org/primary/p/219543/ .

Applications of Motivation Research to Practice

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Bembenutty, H., Schunk, D., & DiBenedetto, M. K. (2021). Applications of motivation research to practice. *Theory into Practice*, https://doi.org/10.1080/00405841.2021.1929000

Recent Chapters and Edited Books:

Schunk, D. H., & DiBenedetto, M. K. (2022). Academic self-efficacy. In M. J. Furlong, R. Gillman, & E. S. Huebner (Eds.). *Handbook of positive psychology in the schools* (3rd ed., pp. 268-282). New York: Routledge.

DiBenedetto, M. K., & Schunk, D. H. (2022). Assessing academic self-efficacy. In T. Nielsen & M. S. Khine (Eds.), *Academic self-efficacy: Theory, measurement, and research* (pp. 11-37). New York: Springer.

DiBenedetto, M. K., & Schunk, D. H. (2021). Motivating students and their teachers through self-regulated learning and reframing assessment language. In S. L. Nichols & D. Varier (Eds.), *Teaching on assessment* (pp. 57–82). Information Age Publishing, Inc.

Flanigan, A. E., & Kim, J. H. (Eds). (2022). *Digital distractions in the college classroom*. IGI Global Publishing.

Schunk, D. H., & DiBenedetto, M. K. (2021). Self-efficacy and human motivation. In A. J., Elliot (Ed.), *Advances in motivation science* (pp. 153-179). Oxfordshire, England: Elsevier.

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