A Note From Our Outgoing Assistant Chair, Dr. Olusola Adesope

Hi there:

It has been such a great honor for me to serve as the Assistant Chair of the Department and specifically coordinating the Educational Psychology program for the past two years. I want to use this opportunity to thank my colleagues who are to me the finest faculty anyone can work with. All our faculty in the Educational Psychology program have worked extremely hard to elevate our program even in spite of the pandemic. I also want to thank our students who have been tremendously supportive of the program and are major partners in many of the activities and accomplishments we made during the last academic year.

This newsletter covers some of the key activities and accomplishments we all had together as a program in 2020/2021. We know that 2020/2021 academic year was fully marked with COVID-19 restrictions and extremely limited opportunities to collect data and work with members of our research community in a face-to-face setting. Nevertheless, our faculty and students rose above the challenges and did fantastic research, teaching, and service work during the year. Thank you all for advancing scholarships that continue to benefit humanity.

This is my last newsletter as the Assistant Chair and Coordinator of the Educational Psychology program. Some of you may know that I have been named the Associate Dean for Research and External Funding, a position occupied by my good friend and colleague, Dr. Brian French who has done a fantastic job as our Associate Dean the past two years. From this fall semester, another great colleague, Dr. Kira Carbonneau, will be the Assistant Chair and Coordinator of the Educational Psychology program. I am sure that Dr. Carbonneau will take the program to a higher level over the next few years. Please join me in thanking Dr. French for his service to the entire college and Dr. Carbonneau for stepping up to this role. The future of our program is indeed bright.

I want to reiterate my appreciation to faculty, students, and administrators who supported the strategic initiatives we worked on during my 2 years in this position. As I look back, I am profoundly grateful for all your support on many of our program-level activities. Together, we accomplished a lot but due to space constraints, I only highlight a few of our program-level accomplishments below. Together, we:

1) Changed the educational psychology's Classification of Instructional Programs (CIP) code to a STEM code thus allowing our international students the opportunity to work in the United States for up to three years on optional practical training after they graduate. This will especially be useful for our Ph.D. students who seek to obtain up to 3 years of postdoctoral positions anywhere in the United States. Many of our Ed

Psych international students have expressed appreciation and excitement about the opportunities this initiative will afford them.

2) Hosted a virtual national panel of experts on how to investigate constructs through the lens of race and culture. The panel featured the following speakers: Dr. Jamaal Matthews from the University of Michigan, Dr. Francesca Lopez from Pennsylvania State University, Dr. Bradley Bergey from City University of New York, Dr. DeLeon Gray from North Carolina State University, and Dr. Carlton Fong from Texas State University. The national panel was a huge success drawing attendees from different departments and units on campus including the Provost's office. Going forward, we made a decision to host a national panel of experts on key topics once a year.

3) Broadened dissemination of faculty and students' research through the installation of a digital monitor in Cleveland Hall. We hope this will give our work (and those of our other colleagues) more visibility.

4) Strengthened our curriculum through the development and offering of some new content and method courses.

This newsletter only highlights few of our faculty and students' work in 2020/2021 year. In the newsletter, you will read highlights on the following:

1) Students and faculty achievements
2) Learn about the different projects that our INTO graduates completed for their masters degrees.
3) Strategies for sustaining a positive program community during COVID
4) Faculty's achievements in 2020/2021 year, especially on grants and key research products
5) Recent Ph.D. graduates and where they are now
6) 2020/2021 publications and presentations authored by our students

I hope reading this newsletter will inspire you to be a part of our Ed Psych community and support the program in any way possible. I will be rooting for Dr. Carbonneau and all our faculty and students in our quest to making the Ed Psych program one of the best in the country. With the array of great faculty and students we have, I can say that the best is yet to come. Let's keep on keeping on!

I wish you great success throughout the 2021/2022 academic year.

Sincerely,

Olusola O. Adesope
Professor and Assistant Chair
Educational Psychology Program

A Year In Review

It goes without saying that the last year was a year of change, turmoil, sadness, isolation, but after some reflection, it was also a time of togetherness—with our unit families, bubble friends, and long-distance connections that would appear at our kitchen table with a click of a button.

Our Ed Psych community was challenged by these events but as with so many other challenges we rose to the occasion. This was especially true with our research. When our studies and community events came to a screeching halt we got creative and changed our perspective to see the positive side of conducting research online. Our Ed Psych faculty and students compiled a list, not in ranking order, of the top ten ways we turned a negative into a positive and met the challenge of conducting research from a distance.

#1 We "traveled" to authentic settings. As noted by Ph.D. candidate Dustin Van Orman - one major affordance of the pandemic was Zoom, which it enabled him to "travel" into the schools of student teachers (who he was interviewing on their break), and living rooms of people who have made the decision to pursue teaching. This added an element of authenticity to the information he was gathering. His dissertation was set free of geographic space and eventually expanded from a single institution study to a nationwide study of preservice teachers' classroom assessment literacy, with 37 participating universities in 28 states.

#2 We looked for an alternative. Restricted data sources such as the National Assessment of Educational Progress (NAEP) which require specific labs to access the data were no longer accessible. Overcoming this challenge Drs. Dai and Danielson with their teams of students looked for alternative data sources such the TIMSS or PISA—these data sources are free and accessible online.

#3 We came together. Drs. French and Adesope ensured that progress was made by creating weekly Zoom lab meeting. This was done not only to monitor research progress but as a way to stay connected with students, listen to their concerns, try to assist as challenges arose, and ensure that students were able to continue developing their ideas.

#4 We made new spaces. Drs. Carbonneau and French created virtual lab spaces for remote access to computers and software for students. This switch was also supported by educational associations and software companies which offered free learning opportunities and online resources. As Dr. Dai noted, SPSS offered a free license to students, SAS offered a free textbook, and AERA offered many free professional development trainings and workshops.

#5 Used what participants knew. Dr. Rachel Wong, a recent graduate of the Ed Psych program, in designing her dissertation study quickly learned that using tools that participants were already familiar with and have easy access to was key to ensuring that data was collected efficiently. For example, using Google Docs or Google Slides allowed her to capture participants responses and collaborative work while not physically present in the same room.

#6. Flexibility of time and increase access. The boundaries of the work day were often pushed, while this may not have always been a positive thing it did allow for participants to join research when they could. Participation was no longer restricted by when a lab was open. For many projects this allowed for an increase in participants' access, participants that would have otherwise had to decline due to work or school schedules.

#7. A return to the literature. Not only do meta-analyses and systematic reviews help synthesize the literature and move research forward—they also don't require participants! When we couldn't get to our participants we returned to what others have studied, aggerating studies results to determine the who, what, and when questions of our research ideas.

#8. A time to build support. Many Ed Psych faculty also turned to grant writing during this time of online research. For example, Drs. Gotch and Carbonneau built upon community and school relationships to submit several grants that will fund classroom-based research once schools open again. The time spend writing these grants is critical for supporting future research.

#9. Online platforms. Qualtrics, Zoom, and Online Videos to the rescue! Need we say more! These online resources saved the day allowing for immediate connections and online experiments and data collection. For example, Dr. Adesope's hands-on research in engineering education seems to be directly affected by the pandemic with the abrupt switch to online learning. Overcoming this challenge, he and his collaborators used multimedia learning experiences to create interactive videos and conduct online experiments. The videos were widely watched across various universities allowing data collection across different universities in the United States.

#10. Collaborate. The switch to online research made the need for collaboration in research even more apparent. Noting this, Dr. Danielson quickly recognized the need to collaborate with colleagues who already had access to online subject pools via SONA and other systems. This quick change to online participants ensured that data was still able to be collected, moving our knowledge of topics forward.

While there are plenty of downsides to the pandemic and research online, there have been many additional affordances too. Needless to say, Ed Psych is ready and waiting for our next challenge.

Recent Ed Psych Program Graduates

Congratulations to our recent program graduates!

Dr. David Alpizar – for successfully completing his dissertation titled "A systematic review and evaluation of testlet response theory" and starting a psychometrician position at the Cambium Learning Group.

Dr. Rachel Wong – for successfully completing her dissertation titled "Collaborative Concept Mapping – Meta-analysis and empirical study" and starting a position as a tenure-track assistant professor of educational psychology at Texas A & M University in Commerce, Texas.

Dr. Ashley Vaughan – for successfully completing her dissertation titled "Service learning in undergraduate education: A collective case study and meta-analysis" and starting a position as an assistant professor of educational psychology at Northern Arizona University at Flagstaff.

Dr. Katie Reilly—for successfully completing her dissertation titled "Exploring the impacts of academic support interventions for undergraduate students on academic probation" and now enjoying life as a full time mom to her infant son before jumping into work.

Project information for students who graduated on the non-thesis master's degree track.

Prachya Senavat – "Promoting Conceptual Change Toward a Growth Mindset In Young Students"

Xiaoya Wang – "The Relationships Between Social Emotional Learning (SEL) and Goal Orientation"

Can Xiao – "How Children Self Regulate Their Negative Emotion and the Relation with Academic Performance"

Yu Xue – "The Effectiveness of Artificial Intelligence on Academic and Social Development of Children"

Manxi Zhao – "Identification of Factors That Lead to Bullying Among K-12 Students"

## *Giving Back to Your Program*

Alumni and Friends:

Consider giving back to support your Educational Psychology program at Washington State University. Donations can support a variety of program pillars from research hardware and software to student travel, scholarship, and research positions.

For information on how you can help us grow please contact Olusola Adesope (olusola.adesope@wsu.edu).

Recent Ph.D. Graduate: Rachel Wong
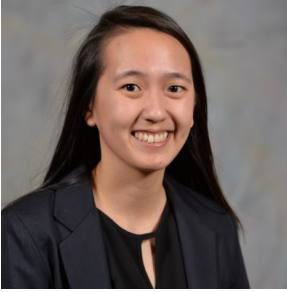
I started graduate school in the fall of 2015, with Dr. Olusola Adesope as my advisor, in what was then the Department of Educational Leadership, Sport Studies, Educational and Counseling Psychology. However, my introduction to research in graduate school really started in the summer of 2015. To prepare for graduate school, Dr. Adesope recommended that I read The Cambridge Handbook of Multimedia Learning over the summer and take notes on gaps in existing literature. I daresay that the readings I completed over the summer laid the foundation for the research that I would come to do over the next few years in the Educational Psychology program as a graduate student. For starters, my master's thesis, which has been published, focused on the use of worked examples and self-explanations with middle school students in a multimedia learning environment. Since then, I have also worked on three other meta-analyses that examine different features in multimedia learning environments; the use of emotional designs (Wong & Adesope, 2021), the role of signaling (Alpizar et al., 2020), and the effectiveness of pedagogical agents (Castro-Alonso et al., 2021). Having similar research interests as my advisor helped me as I developed my own research agenda in graduate school. In addition to our shared interest in multimedia learning and STEM education, Dr. Adesope also got me involved in research on concept mapping. Dr. NarayanKripa Sundararajan (alumna of the Ed Psych program) was one of the first students to work with Dr. Adesope in establishing the ongoing collaboration between our MERIT Lab and the Chemistry Department. When I became Dr. Adesope's research assistant in fall 2018, I took over the project and primarily designed and conducted concept mapping classroom-based research studies with undergraduate chemistry students in introductory chemistry. The collaborative efforts between both programs have been fruitful. We have published four manuscripts, submitted several proposals to AERA and APA, and currently have two manuscripts under review. This exposure to concept maps also made me more aware of potential areas for the field to grow, which then led to my dissertation studies.

In addition, I believe I was also able to be productive in research due to the way courses are structured in the Ed Psych program. The first drafts of many of my published journal articles and accepted conference proposals were written as final papers/projects in the classes I took! I was able to use the valuable feedback provided by the professors to turn the work into something that was publishable or conference worthy. I also benefited a lot from other faculty in the program who willingly brought me on board some of their research projects and were open to my contributions. Both my collaborations with Dr. Kira Carbonneau (which started off as a conversation about my interest in math) and Dr. Zoe Higheagle Strong (which started off as summer work) have also resulted in publications, and more importantly, ongoing collaborations.

The Ed Psych faculty have not only provided research guidance and support, they have also provided other students and I with financial support. For instance, I have benefited from the Ed Psych travel grant initiative which allowed me to travel for conferences without having to worry about my finances. I have also had summer funding every year in the form of summer research projects that have led to ongoing collaborations. I have also been very blessed to have been nominated for several WSU Graduate School and the Graduate and Professional Student Association scholarships and grants by my advisor and other faculty who wrote letters of recommendation.

I am excited to share that I am the incoming Assistant Professor in Educational Psychology at Texas A&M University-Commerce. I will be starting my new position in fall 2021. I owe my academic success as a graduate student to Dr. Olusola Adesope, the Ed Psych faculty members, and the other Ed Psych students. Dr. Adesope has entertained a lot of my random and crazy ideas (like the programming camp!) and helped me develop them further. The Ed Psych faculty members have been very supportive of my research and involvement in other university organizations, like GPSA, that I believe have kept me sane. Finally, the Ed Psych students in the program have also helped me develop as a scholar by offering constructive suggestions and feedback on my research throughout the years.
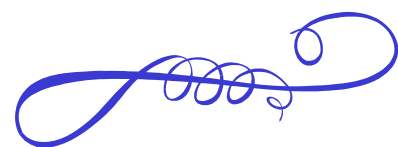
Recent Ph.D. Graduate: David Alpizar

In May of 2021, I received my Ph.D. in Educational Psychology, emphasizing psychometrics, statistics, and research methods. Throughout my academic training at WSU, I had eight opportunities that helped me develop valuable skills that are needed in academic and non-academic jobs. First, I presented several applied projects at national conferences, including the National Council on Measurement in Education, American Educational Research Association, and American Psychological Association. This applied work also introduced me to statistical approaches, including factor analysis, structural equation modeling, and item response theory. Second, I was trained in simulation studies. Simulation studies helped me gained programming skills and taught me the value of investigating the behavior of statistics under different conditions. Third, my work was published in peer-reviewed journals, such as Psychological Assessment. Fourth, I was invited to be the keynote speaker at Los Angeles Community College District Summit 2019 for the Los Angeles Community College District. Fifth, I pursued funding for my dissertation. I was granted the Graduate Dissertation Fellowship at WSU in 2020. This competitive fellowship allowed me to focus on my dissertation in my last year at WSU. Sixth, I became proficient in different software applications, including Mplus, SPSS, R, FlexMIRT, IRTPRO, EQS, and high-speed cluster computing. Seventh, I collaborated and published with peers outside my lab. Eighth, in Summer 2020, I received an instructor position in a graduate course for an introduction to research methods. In sum, my training at WSU provided valuable opportunities, such as grant writing and programming, to develop different skills that are transferable to academic or non-academic jobs.

In addition to my time at WSU, I sought out additional training opportunities. In 2018, I obtained a competitive summer internship with Educational Testing Service (ETS), where I assessed the psychometric properties of a language proficiency assessment. This experience provided critical knowledge and hands-on work-related duties in the testing industry and the resources employed in such an environment to ensure test score accuracy. Given the above experiences, I received an offer for a psychometrician position at Cambium Learning Group and a post-doc position at Morehouse College. Overall, the next chapter of my career is beginning shortly. I am grateful for the mentorship and experiences I received at WSU. Otherwise, I will not be in this position.

For next-generation graduate students and scholars in the Educational Psychology Program at WSU, I will say the following: Now you are starting a new journey. The program builds rock stars (aka high-quality students and scholars). The road ahead might bring different opportunities and challenges for you. The training that you will receive at WSU makes you a valuable prospect for various job settings. Ultimately, your efforts will be rewarded, so you need to stay persistent in your academic journey. The program will give you the opportunities to be a rock star. As for me, thanks to those opportunities and mentorship, I am confident I will be successful at my future job.

Program Statement

We apply advanced methodologies to answer applied and basic research questions in the context of complex educational environments. We develop leaders who possess the knowledge, skills, and abilities to transform educational environments.

Sustaining a Positive Program Community
A Reflection by Dr. Gotch

Strong faculty and smart, ambitious students are essential to forming a top-notch program in Educational Psychology. A recipe with only these ingredients, however, would be incomplete. We need to take care of the environment in which all members of our community come together. This imperative grew even stronger as the COVID pandemic forced a switch to remote learning over the last year.

The bi-weekly seminar in educational psychology provides an opportunity for everyone—faculty, new students, experienced students, students somewhere in between—to share a time and space to learn from one another and enjoy the more social aspects of the program. For the last three semesters, I have had the privilege to lead this seminar and implement a new tradition. At the start of every session, we share 1) our recent successes, 2) our recent failures, and 3) acknowledgments of contributions to the Ed Psych community.

Though some of us might be shy or too humble to self-promote, celebrating our achievements is fun. And we are fortunate to have many within the program. We celebrate big successes, like publishing an article, passing the preliminary examination, or earning a spot on a national committee. We also celebrate small successes, like making it through a class presentation or maybe just getting up and ready to face the day.

While it is great to celebrate our successes, it is also valuable to acknowledge things that did not work out for us. Failure is a normal part of striving for academic excellence, but it is often kept private. We have worked to make visible some of those failures, to applaud good effort and to counter feelings of inadequacy and isolation. Bonus points go to anyone who can share a particularly scathing comment from peer review!

Finally, when I assumed leadership of seminar, I tasked everyone in the program to be purposefully prosocial. (I am a sucker for alliteration.) It is easy to get pulled into the flow of work, putting our head down and marching forward. This force can strain our motivation. By taking the opportunity to acknowledge the efforts and contributions of others—big or small—we boost our collective well-being. Showing appreciation for a contribution to our community can make someone's day, and it feels good doing it.

If you are a graduate or friend of the program, what successes, failures, or contributions would you like to acknowledge? Let us know! If you are a prospective student, we look forward to sharing all of these with you.

2022 Annual Meetings
San Diego, California

AERA
April 22-25, 2022
www.aera.net

NCME
April 22-25, 2022
www.ncme.org

Our Research Centers and Labs

Learning and Performance Research Center (LPRC)
Cleveland Hall Room 80
http://labs.wsu.edu/lprc/

Psychometric Lab
Located within the LPRC
https://labs.wsu.edu/psychometric/

MERIT Lab
Cleveland Hall Room 51
https://labs.wsu.edu/merit/

LSD Lab
Located within the LPRC
https://labs.wsu.edu/lsd/

Highlights of Faculty Achievements for 2020/2021

Our educational psychology program faculty and students have had remarkable achievements in 2020/2021 academic year. The list below is not in any way exhaustive. We provide below only a few highlights of our faculty's achievements during the last year.

- Dr. Brian French – For his pioneering work in the development and application of psychometric methods for validation of test scores and the use of simulation to strengthen statistical models for test development, Dr. Brian French was named a member of Washington State Academy of Sciences. This is a fantastic achievement for Brian and the College of Education. More importantly, he will be a powerful presence at the table ensuring best practices and research in educational psychology are used to inform educational policies in the State of Washington.

    https://news.wsu.edu/2021/07/15/wsu-faculty-named-leaders-new-members-washington-state-academy-sciences/

- Together with researchers in other programs, our own Drs. Brian French, Chad Gotch, and Bruce Austin received $1.4 million Institute of Education Sciences grant for assessment addressing truancy in schools. The grant will be used to improve the Washington Assessment of the Risks and Needs of Students (WARNS) program. WARNS uses evidence-driven procedures to track and improve interventions with students. More than 100 schools in Washington state and across the nation are now using the tool.

    https://news.wsu.edu/2021/07/22/wsu-faculty-receive-1-4-million-grant-assessment-addressing-truancy-schools/

- Drs. Chad Gotch and Kira Carbonneau are principal and co-principal investigators (respectively) on $515,000 National Science Foundation grant to improve teacher ability to support student success across all life sciences. Together with other faculty, the researchers will focus on supporting teachers in teaching and assessing crosscutting concepts.

    https://news.wsu.edu/2021/04/27/nsf-grant-help-improve-student-success-life-sciences/

- Dr. Zoe Higheagle Strong and Bruce Austin are Principal and Co-principal Investigators (respectively) on $288,160 U.S. Department of Agriculture grant on culturally sustaining and revitalizing approach to Native American undergraduate recruitment, retention and Tribal Nation building. The project will support a mixed-method study and expand tribal nation building programming/courses to all WSU campuses.

- Dr. Olusola Adesope together with faculty in the College of Engineering & Architecture have been awarded $1.5 million Department of Defense grant to create a new regional cybersecurity education and research institute. The institute will help train the next generation of experts that will tackle data breaches and other cyberattacks through robust cybersecurity measures.

    https://news.wsu.edu/2021/07/16/wsu-lead-cybersecurity-education-research-institute/

- Dr. Hsin-Ya Liao successfully graduated her last PhD student in counseling psychology and mentored him to secure a postdoctoral position.

- Dr. Shenghai Dai and colleagues published two new packages in R (*DIFplus* and *ROCpsych*). The packages have been downloaded about 7,000 times. What a great impact!

- Dr. Robert Danielson, with a colleague from another university, co-authored a chapter in the *Handbook of Educational Psychology* and published another paper in *Metacognition and Learning*. Way to go!

- Faculty supported all our students leading to over 40 student presentations and publications (please see pages 8-10 for the section on Student Publications and Presentations).

Student Publications and Presentations

Our students are the key to the success of our program. You will find them at almost every major academic conferences in our field and their research is usually published in many key journals in the field. Please see below a representative list of papers presented by educational psychology students at conferences and published in journals in academic year 2020/2021. This list only features some of our students' work and is not a comprehensive list. Students' last names are in bold.

Publications:

Castro-Alonso, J. C., **Wong, R. M.**, Adesope, O. O., & Paas, F. (In Press). Effectiveness of Multimedia Pedagogical Agents Predicted by Diverse Theories: A Meta-Analysis. *Educational Psychology Review*. Advance online publication. https://doi.org/10.1007/s10648-020-09587-1

Gotch, C. M., Carbonneau, K. J., & **Van Orman D. S. J.** (2021). Preparing Pre-Service Teachers for Assessment of, for, and as Learning. In S.L Nichols and D. Varier (Eds.) Teaching on Assessment: Theory to Practice: Educational Psychology for Teachers and Teaching (Vol. 1). Charlotte, NC: Information Age Publishing.

Gotch, C. M., & **Van Orman, D. S. J.** (2021). [Review of the Social Language Development Test- Elementary: Normative Update]. In J. F. Carlson, K. F. Geisinger, & J. L. Jonson (Eds.). The Twenty-first Mental Measurements Yearbook (pp. 686-688). Lincoln, NE: Buros Center for Testing.

Higheagle Strong, Z., & **McMain, E. M.** (2020). Social emotional learning for social emotional justice: A conceptual framework for education in the midst of pandemics. *Northwest Journal of Teacher Education, 15*(2), 1-11.https://doi.org/10.15760/nwjte.2020.15.2.6

Hu, Y., **Wong, R. M.,** Adesope, O. O., & Taylor, M. (2020). Effects of an intelligent tutoring system that teaches senior how to install a smart home system. *Computer & Education*, 149.

McMain, E. M., & Edwards-Schuth, B. (in press). Horrors of the Great Banal. *Policy Futures in Education.*

McMain, E. M. (2021). "I feel proud because I made them stop fighting": Boys' affective-discursive practices of discouraging physical aggression. *Gender and Education.* https://doi.org/10.1080/09540253.2021.1902484

McMain, E. M., & Torres, J. T. (2021). Understories and upside-downs: The pedagogical misanthropy of *The Overstory* and *Stranger Things*. *Interdisciplinary Studies in Literature and the Environment*, 1-22. https://doi.org/10.1093/isle/isaa206

McMain, E. M., & Higheagle Strong, Z. (2021). Troubling dominant understandings of emotion in educational settings: A critical reflection on research and curriculum. *Critical Questions in Education, 12*(1), 1-19.

Sunday, O. J., Adesope, O. O., & Maarhuis, P. (in press). *The effects of smartphone addiction on learning: A meta-analysis. Computers in Human Behavior Reports.*

Van Orman, D. S. J., Ardasheva, Y., Carbonneau, K. J., & Firestone, J. B. (2021). Examining the Impacts of Extended Vocabulary Instruction in Mixed-English-Proficiency Science Classrooms. Journal of Educational Research. https://doi.org/10.1080/00220671.2021.1881754

Vo, T.T., & French, B. F. (2020). An ecological framework for item responding within the context of a youth risk and needs assessment. *Educational Measurement: Issues in Practice*. Advance online publication. https://doi.org/10.1111/emip.12426

Vo, T.T., Ullrich-French, S., French, B.F. (2021). Psychometric properties of the academic intrinsic motivation scale in a high school context. *Journal of Psychoeducational Assessment, 39*(3). https://doi.org/10.1177/0734282920975526

Wong, R. M., & Adesope, O. O. (In Press). Meta-Analysis of Emotional Designs in Multimedia Learning: A Replication and Extension Study. *Educational Psychology Review, 33,* 357 - 385.

Wong, R. M., & Adesope, O. O. (In Press). Computer-based learning of mathematics from worked-examples and self-explanations to improve learning performance. *Journal of STEM Education.*

Wong, R. M., Sundararajan, K., Adesope, O. O., & Nishida, K. (In Press). Static and interactive concept maps for chemistry learning. *Educational Psychology.*

Student Publications and Presentations, Cont'd

Presentations:

Aina, S., & Adesope, O. O. (2021). Effects of self-generated versus scaffolded concept maps on STEM learning. 2021 Annual meeting of American Psychological Association (APA), Virtual Conference.

Beheshti Pour, N., Thiessen, D., Van Wie, B., Kaiphanliam, K., Khan, A. I., Dutta, P., Reynolds, O., Dahlke, K., Adesope, O., **Oje, O.**, & Gartner, J. (2020). *Design Philosophy and System Integrity for Propagation of Hands-on Desktop Learning Modules for Fluid Mechanics and Heat Transfer.* 2020 ASEE Virtual Annual Conference Content Access Proceedings, 34396. https://doi.org/10.18260/1-2--34396

Cain, L., Ketterlin-Geller, L.R., Grover, R.K., Manna, V.F., Bridges-Rhoads, S., Smith, V.S., Helsabeck, N., Maravillas, M.A., & **Vo, T.T.** (2021). Division D Paper and Symposium Sessions. In Sergovia, G. A. & Iwatani, E. *Accepting educational responsibility in education research methodologies and measurement: Narratives exploring equity and inclusion.* American Educational Research Association San Francisco. (Virtual Conference).

Dahlke, K., Kaiphanliam, K., Van Wie, B., Thiessen, D., Dutta, P., Adesope, O., Reynolds, O., Khan, A. I., Gartner, J., & **Oje, O.** (2020). *A First-year Progress Report on "Collaborative Research Using Low-cost Desktop Learning Modules to Educate Diverse Undergraduate Communities in Engineering."* 2020 ASEE Virtual Annual Conference Content Access Proceedings, 34003. https://doi.org/10.18260/1-2- -34003

Demir, C., & French, B. F. (2021). Applicability and Efficiency of a Computerized Adaptive Test for Risk Assessment [presented in Research Blitz session]. NCME Annual Meeting Baltimore, MD (Virtual Conference).

Hao, T., Dai, S., Ardasheva, Y. **Ramazan, O.**, Danielson, R. W., & Austin, B. W. (2021). *Student 2018 PISA Reading Achievement: Identifying Predictors and Examining Model Generalizability for English Learners.* Paper presented [Poster Session] at the annual meeting of American Educational Research Association (AERA), Virtual Conference. https://tinyurl.com/y62xk73u

Jacobson, N. G., Patall E. A., Sinatra, G. M., Kennedy, A., Adesope, O., Danielson, R. W., **Ramazan, O., Jin, G.,** et al. (2021). *The refutation text effect on science learning: The moderating role of text characteristics.* Paper presented at the annual meeting of American Educational Research Association (AERA), Virtual Conference. https://tinyurl.com/y24mv6jg

Jin, G., Ramazan, O., Lee, D. K. L., & Danielson, R. W. (2021, April). *Relationship between Metacognition and Reading Achievement: Moderation Role of Teachers' Stimulation of Reading Engagement.* Paper presented [Roundtable Session] at the annual meeting of American Educational Research Association (AERA), Virtual Conference. https://tinyurl.com/yxvyesm4

Jin, G., Ramazan, O., Danielson, R. W., & Lippmann, M. (2021). *Illusions of Learning: Metacognitive Pitfalls in Online Learning*. Paper accepted to be presented [Poster Session] at the annual meeting of American Psychological Association (APA), Virtual Conference.

Kaiphanliam, K., **Oje, O.**, & Adesope, O. O. (2021). *Work-in-Progress: Modeling the Effect of Hematocrit on Blood Cell Separations Using a Fidget Spinner Hands-On Learning Device and Microbead Blood Simulant*. American Society for Engineering Education Conference.

Lee, D. K. L., **Ramazan, O.**, & Danielson, R. W. (2021, August). *Fact-checking on social media: Moderated mediation of media usage, confidence and health motivation*. Paper accepted to be presented [Poster Session] at the annual meeting of American Psychological Association (APA), Virtual Conference.

Liu, Q., **Wong, R. M.**, Adesope, O. O., & Nishida, K. (Accepted). Comparative Effects of Individual and Collaborative Construction of Concept Maps. American Educational Research Association, Virtual Conference.

McMain, E. M., & Higheagle Strong, Z. (April, 2021). Transformative education against oppression: An emergent framework of social emotional learning for social emotional justice [Roundtable session]. American Educational Research Association, Virtual Conference.

Student Publications and Presentations, Cont'd

McMain, E. M., & Torres, J. T. (April, 2021). Horrors in the Chthulucene: "Pedagogical Misanthropy" as a critical framework for disrupting anthropocentric media [Roundtable session]. American Educational Research Association, Virtual Conference.

Oje, A. V., **Sunday, O. J.**, Hunsu, N., & Fiorella, L. (2021). *Research-based principles in virtual reality environment: A systematic review*. Presented at *the* American Educational Research Association, Virtual Conference.

Oje, O., Adesope, O. O., & Oje, A. V. (2021). *Work-In-Progress: The Effects of Hands-on Learning on STEM Students' Motivation and Self-Efficacy: A Meta- Analysis*. American Society for Engineering Education Conference.

Ramazan, O., Dai, S., Danielson, R. W., Austin, B. W., Hao, T., & Ardasheva, Y. (2021, April). *Students' 2018 PISA Reading Self-Concept: Identifying Predictors and Examining Model Generalizability for English Learners.*Paper presented [Roundtable Session] at the annual meeting of American Educational Research Association (AERA), Virtual Conference. https://tinyurl.com/y4bnkruh

Ramazan, O., Jin, G., Danielson, R. W., & Lippmann, M. (2021, August). *The Effect of Text-Title Congruency When Learning Online*. Paper accepted to be presented [Poster Session] at the annual meeting of American Psychological Association (APA), Virtual Conference.

Randall, J., Edynn, S., & **Vo, T.T.** (2021). Technical Issues in Large Scale Assessment Invited Sessions. In Bennett, R., Marion, S., *Equity and assessment in the post-COVID-19 era*. National Conference on Student Assessment, Council of Chief State School Officers. (Virtual Conference).

Reynolds, O., Kaiphanliam, K., **Oje, O.,** Aminul, I., Gartner, J., & Adesope, O. O., et al. (2021). *Transition of an Interactive, Hands-On Learning Tool to a Virtual Format in the COVID-19 Era*. American Society for Engineering Education Virtual Conference.

Sunday, O. J., Adesope, O. O., **Wong, R., Oni, O. S.,** & Nishida, K. (2021). *The effects of concept maps with feedback on chemistry learning performance.* Presented at American *Education Research Association Annual Meeting* (Virtual Conference).

Sunday, O. J., Adesope, O. O., & Ewumi. E. (2021). *Investigating factors that predict academic success in Engineering and Computer Science*. American Society for Engineering Education Annual Conference & Exposition, Virtual Conference.

Van Orman, D. S. J. (2021). Examining Preservice Teacher Formative Classroom Assessment Literacy. Working paper presented at the Division K Mentoring Preconference Session at the annual meeting of American Education Research Association (AERA), Online. Mentor: Dr. Alicia Alonzo.

Van Orman, D., Seo, S., Paxson, L., Murray, J., & Beattie, M. (2021, March). Breaking down barriers in academic and professional fields through interdisciplinary project-based learning and merged coursework. Presented and received a Best Paper Award at the EDUNINE 2021 V IEEE World Conference on Engineering Education, Guatemala City, Guatemala and Online. https://doi.org/10.1109/EDUNINE51952.2021.9429116

Wong, R. M., Alpizar, D., Adesope, O. O., & Nishida, K. R. A. (Accepted). *The Effect of Concept Map Format on Electrochemistry Learning: Fill-in-the blank vs. Map Correction*. American Educational Research Association, Virtual Conference.

Wong, R. M., Collins, B. L., Cooper, C. M., & Adesope, O. O. (2020). *To Highlight or Summarize? The Benefits of Constructive Learning in Geology.* Poster presented at Earth Educators' Rendezvous 2020 Virtual Conference.