

Introduction to Special Issue on Postsecondary and Tertiary Peer-Assisted Learning and a Future Research Agenda

David R. Arendale 

Curriculum and Instruction Department, University of Minnesota-Twin Cities, Minneapolis, MN 55455, USA; arendale@umn.edu

1. Introduction

The *Journal of Education Sciences* is pleased to welcome you to this Special Issue, “Postsecondary and Tertiary Peer Assisted Learning (PAL)”. Reports on the effectiveness of such practices are ubiquitous in the global education field. Dr. Alexander Astin and his research colleagues identified, through research on hundreds of thousands of students, that the most significant impact variable upon students during college is their interaction with peers [1]). In their analysis of research on the college experience, Ernest Pascarella, Patrick Terenzini, and their colleagues identified many studies that replicated Astin’s findings [2]). David Arendale annually publishes an annotated bibliography of 2100+ research studies focused on the major international PAL programs [3]. While there are many published reports on PAL, far fewer identify specific practices that must be followed to achieve the desired results. We hope that we have contributed to closing this gap in evidence-based practice.

This Special Issue addresses the needs of postsecondary/tertiary students through a learning environment that enhances their academic achievement, engagement, learning mastery, and persistence to graduation. PAL accomplishes these purposes if specific guidelines and best practices are followed. The articles in this Special Issue synthesize information from disparate backgrounds, place research findings within a broad context, extend our methodological and theoretical understanding, and inform education policy and practice. The articles employed quantitative, qualitative, and mixed-method research methods.

2. Current Volume

As guest editor, I share my perspective on why each article is an exceptional part of this Special Issue on PAL. The authors of each article explore the PAL experience and its impact on the institution, participating students, and the PAL facilitators in depth. The studies were conducted in several countries around the globe. The complete abstracts and links to each article are on separate web pages.

Keith Topping: *Advantages and disadvantages of online and face-to-face peer learning in higher education: A review*. Amid the pandemic, educational institutions transitioned to online teaching, impacting peer learning programs. post-pandemic, these programs diversified—some reverted to in-person learning, some embraced a blended approach, and others stayed online. This careful review of the literature identifies the strengths of these three approaches. It provides guidance for the next pandemic or administrators deciding to offer PAL through hybrid or online modalities. Some medical authorities argue that it is only a matter of time before another pandemic afflicts humanity and disrupts education systems again.

Felix Quinones-Ramirez, David Duran, and Laia Viladot: *Co-teaching with high school students for music teaching*. The study assessed the benefits and limitations of this peer learning method, where students act as co-teachers alongside the instructor. This was an exciting article that explored a new area of collaboration. It reminded me of the Students-as-Partners (SaP) movement operating in Australia and the United Kingdom and now



Citation: Arendale, D.R. Introduction to Special Issue on Postsecondary and Tertiary Peer-Assisted Learning and a Future Research Agenda. *Educ. Sci.* **2024**, *14*, 73. <https://doi.org/10.3390/educsci14010073>

Received: 28 December 2023

Accepted: 4 January 2024

Published: 8 January 2024



Copyright: © 2024 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

beginning in the USA and other countries. This article identifies a practice that bridges the traditional boundaries of PAL with the emerging SaP approach to learning.

Irina Ellison, Gabriele Haynes, and Joan Toglia: *The perceived impact of learning Supplemental Instruction on student leaders at a Hispanic-Serving Institution*. Led by near-peer leaders, the program's impact on historically underrepresented student leaders at Hispanic-Serving Institutions (HSIs) is underexplored. Most PAL studies are conducted at Predominately White Institutions. We need more studies such as this one to explore issues of race and cultural diversity that impact the outcomes of PAL programs with majority and minority students.

Irina Ellison, Ferdinand Esser, Jean Walsh, Christian Lucio, and Joan Toglia: *Improving student success through Supplemental Instruction in an Anatomy and Physiology laboratory*. While Supplemental Instruction (SI) has proven effective in a wide range of classroom-based courses, its application in laboratory-based courses for first-year and second-year students remains understudied. SI was first used in an A & P classroom when the model was created at the University of Missouri–Kansas City. This article identifies a new avenue for serving students that has been overlooked.

David Arendale and Amanda Hane: *Professional teacher identity on the boundary: Student study group facilitators negotiating their identity*. This study unexpectedly revealed that study group facilitators developed a professional identity as teachers, deviating from prescribed policies as student peer-assisted learning group facilitators. The article provides insight into the hidden attitudes and behaviors of facilitators and challenges the program administrators on how they should respond in a productive way. The study reveals the cocurricular impact of PAL experiences upon the students. The study raises the question of what could occur in PAL programs if the program administrators were intentional with desired personal and professional development outcomes.

Karen Putzeys, Hilde Van Keer, and Bram De Wever: *Unknown is not chosen. University student voices on group formation for collaborative writing*. This research study explored the hidden world of the student as they decide how to form their groups for collaborative assignments. This is an important part of most peer learning pedagogies. The study revealed the role of prior collaborations with a student, selecting students with similar attitudes, abilities, task approaches, and perspectives toward the academic content of the learning task. The researchers discuss the merits of instructor-constructed groups and those that are formed by the students. Understanding the dynamics of student learning groups is critical to promoting higher effectiveness in students' outcomes and satisfaction levels.

3. Future Research Agenda

The following research recommendations are based on the articles in this Special Issue, the professional literature, and my own thoughts. The contributors to this Special Issue have propelled the field forward, yet there remains a substantial requirement for expanding upon their efforts. This is especially true in conjunction with fellow scholars within the burgeoning realm of student-led peer learning groups. The proliferation of evidence-based practices is a promising development. Nonetheless, the magnitude is such that instigating change on a classroom or student service unit basis is insufficient. In addition to amplifying the scale of this grassroots transformative process, there is a need for institutional climate adjustments that start top-down change. Further endeavors are imperative to plan effective practices at a macro level, enabling others to customize and implement them within their own institutions.

Many who manage PAL programs have little discretionary time for research and scholarly writing or expertise for sophisticated quantitative, qualitative, and mixed-method research studies. I urge you to form partnerships with faculty members who could act as writing and research partners. We must move the field forward if we hope to be prepared for today's and tomorrow's challenges. The following are a few areas recommended for additional research.

The missing voices of historically underrepresented (HR) PAL participants must be included to ensure PAL is relevant now and in the near future. More qualitative studies

of HR, indigenous, immigrant, and minoritized PAL participants and nonparticipants are needed. Their experiences are often different and filled with microaggressions during the PAL sessions compared to those of the majority students at an institution. How can the PAL experience be more inclusive for all students? How does the campus institutional climate impact these non-majority students' choices to participate in PAL sessions or serve as PAL facilitators?

A rigorous comparison of different PAL learning modalities is needed now. Our world has changed due to the consequences of the COVID-19 pandemic on the operation of educational activities. In this Issue, Topping has explored the professional literature in this area and identified promising practices for increased effectiveness. The demand for online learning modalities requires that researchers identify effective best practices for hybrid and online PAL approaches. Are we prepared to move PAL online with equal or higher effectiveness than face-to-face interactions with little notice, as occurred with the recent COVID-19 pandemic? What are the lessons learned from the recent move of PAL to online learning in response to the COVID-19 pandemic?

It is recommended that researchers experiment with traditional PAL facilitator boundaries when conducting their study group sessions. In this issue, Quinones-Ramirez, Duran, and Viladot reported on co-teaching with students. More experiments like this need to be conducted and the results reported. What are the opportunities for providing a better service to the students when faculty members and PAL facilitators work as a visible team during class sessions if they observe clear boundaries of behavior?

A deeper understanding of PAL facilitator identity formation is needed. In this issue, Arendale and Hane reported on temporary PAL facilitator teacher identity formation. More research is needed to understand the influence of the PAL facilitator experience on their identity formation as a teacher, leader, and future vocational choice. What are the factors that influence PAL facilitators regarding identity formation? How could PAL program administrators help foster this environment for student personal growth?

Unmask the role of Communities of Practice (CoP) populated by PAL facilitators that influence their attitudes and behaviors. PAL facilitators create CoPs that are, by their very nature, hidden from the PAL program administrators. Understanding the dynamics and influence of CoPs can help support the facilitators in their roles. How can the PAL program administrators support these CoPs without their direct involvement?

More studies on the long-term impact of the PAL experience on facilitators are needed. While more than 50 studies have identified job skills that PAL facilitators acquired, long-term follow-up studies of 5 to 10 years to provide an understanding of their experiences in the world of work are lacking. What is the long-term impact of the PAL experience on facilitators' vocational and personal lives?

Expand the professional literature on peer learning with more than one international model of PAL. Supplemental Instruction-PASS is the most reported peer learning model in the professional literature, with more than one thousand articles, dissertations, reports, and studies. It is an admirable model that many institutions have found useful. In recent years, there has been an acceleration of publications describing and reporting research studies of the Embedded Tutoring, Learning Assistant, and Peer-Led Team Learning models. More reporting on the scholarship of these and other national and international models for PAL is essential. What are their best practices that could be incorporated into campus PAL programs?

4. Conclusions

This Special Issue provides many surprising findings and new opportunities for reinventing PAL programs to be more responsive for the participating students and a richer personal and professional development experience for the student facilitators. We hope you enjoy these articles as you reflect on your own peer programs. I am honored to have been a guest editor and interacted with the authors. It was a great learning experience. Many thanks to the editorial staff of the *Journal of Education Sciences* for their guidance and

assistance. The email addresses are provided for the authors. I encourage you to engage with them in conversation. Let us all work collaboratively to move the PAL model forward to provide a more effective service for students.

Acknowledgments: I acknowledge the lessons learned from my student PAL facilitators over many years. In particular, I recognize the influence of Brian Fredrickson, who began as one of my students, PAL facilitators, and a friend for decades afterward. I also acknowledge the influence of my colleagues in the PAL profession, who have influenced and taught me many lessons. In particular, I recognize the role that Deanna C. Martin played in my life as my mentor and friend.

Conflicts of Interest: The author declares no conflicts of interest.

References

1. Astin, A.W. What matters in college? Four critical years revisited. *J. High. Educ.* **1993**, *22*, 8.
2. Pascarella, E.T.; Terenzini, P.T. How college affects students: A third decade of research. *J. Stud. Aff. Afr.* **2005**, *2*, 2.
3. Arendale, D.R. (Ed.) 2022 Postsecondary Peer Cooperative Learning Programs: Annotated Bibliography. 2022. Unpublished Work. ERIC Database. (ED628254). Available online: <https://z.umn.edu/peerbib> (accessed on 4 January 2024).

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.