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TABLE OF CONTENTS

VOLUME 42 | NUMBER 2 | FALL/WINTER 2023

Call for Submissions	5
Nominate a PASCD Member for the 2024 Outstanding Research and Publication Award	7
Letter from the Editor	8

RESEARCH MANUSCRIPTS

Enhancing Student Engagement and Promoting Deep Learning:	
The Benefits of Using Social Learning Platforms	
Amml Hussein and Juan Rios	9
An Analysis of Emergent Reader Understanding of Words and the Impact on Reading Proficiency	
Aileen P. Hower and Gerald L. Fowler	25
Evaluating Reasonable Suspicion: An Opportunity to Improve Collaboration	
Joel Erion, Meghan Ferraro, and Ed Snyder	35
The Evolution of Educator Induction and its Impact on Comprehensive Programming:	
A Review of the Literature	
Jason Alonzo Stragand	53

PRACTITIONER'S MANUSCRIPTS

Addressing Racially Biased School Disciplinary Practices and the Manifestation of the School-to-Prison			
Pipeline through Restorative Practices			
Jenna Plump			

CALL FOR SUBMISSIONS

Pennsylvania Educational Leadership (PEL) is an open-access, peer-reviewed journal published twice per year and accepts manuscripts year-round. Topics address the interests and concerns of Pennsylvania educators at all levels. We welcome a wide variety of manuscripts including (but not limited to) single study inquiries, qualitative and quantitative research, theoretical and conceptual pieces, historical analyses, literature reviews, action research, and first-person narratives. Beginning spring 2014, the journal began including a Practitioner's Page highlighting the voices, thoughts, and opinions of educators in the field. Submissions for the Practitioners Page can take a variety of formats including (but not limited to) book reviews, policy reviews, and critical reflections on current educational issues and trends. Individuals choosing to submit to the Practitioners Page should follow the same submission guidelines as those submitting manuscripts with the exception of the Abstract. Authors must also indicate that the submission is intended for the Practitioners Page on the cover sheet.

Manuscripts should be emailed to Editor Mary Wolf (PennWest University) at wolf@pennwest.edu for initial review. Submissions evaluated as appropriate for review are then sent to three readers for blind review. Manuscripts should follow the guidelines set forth by the American Psychological Association.

Before submitting a manuscript to PEL, please consider the following guidelines carefully:

- Your manuscript should be submitted as a single Word document and include a cover sheet, abstract, body/text, tables, charts, and figures (if applicable), and references list. If possible, please include the Digital Object Identifiers (DOI) for all electronic sources. The manuscript should be typed in 12-point font, Times New Roman, with one-inch margins. The text should be double-spaced.
- The cover sheet should include the title and author information, including contact information for the primary author, including mailing address, email address, and phone number. On this page, the author should indicate that the manuscript has not been submitted elsewhere for publication. If the manuscript involves the use of human subjects, the author should indicate whether Institutional Review Board approval has been granted unless deemed exempt.
- The second page of the submitted manuscript is the abstract page (for research manuscripts only). The abstract should be 150 words or fewer. The abstract should include the purpose of the manuscript and essential findings or discussion points.
- The author(s) should remove any references that might be self-identifying from the body of the text to ensure blind review of the manuscript.
- The references page will follow the body of the text and any tables, charts, or figures. Please be sure to check that all in-text citations match references in the list and that the list is properly formatted using APA guidelines. Please include the DOI for electronic sources.
- The manuscript content page limit is 20 pages, double-spaced. This does not include title pages or reference pages.
- The deadline for the spring/summer 2024 edition is January 15, 2024.
- Questions regarding a possible submission, submissions under review, or submissions requiring revision can be directed to Mary Wolf (Editor) at wolf@pennwest.edu.

NOMINATE A PASCD MEMBER FOR THE 2024 OUTSTANDING RESEARCH AND PUBLICATION AWARD

The Outstanding Research and Publication Award is presented to Pennsylvania ASCD member who has researched and published within the past two years. The person being nominated shall submit the published article, book, book chapter, or research report with the application form. Submitted documentation will be reviewed on the basis of design, conceptual framework, format, and publication. The award nomination process opens on July 1st. Nomination information may be found at https://www.pascd.org/awards.

LETTER FROM THE EDITOR

Attending the annual PASCD Conference is always a highlight of my fall semester. Not only is it a great opportunity to share and learn about the best practices and research occurring in education across the Commonwealth, but it's a nice chance to be involved with the organization while developing and nurturing professional networks.

Leaders within the field of education are facing unique challenges. To assist with ideas and reference, the PEL Journal provides a variety of topical areas of interest presented as research or practitioner papers. In the first research article, Amml Hussein and Juan Rios explore the application of Perusall, an online social learning platform that allows students and instructors to engage with course materials and interact with each other. Find out about the features of this platform, including how instructors can create a collaborative learning environment leading to better learning outcomes.

Aileen Hower and Gerald Fowler present an action research study that examines the possible relationship between a student's understanding of the spoken word and the written word and the impact on their progress towards reading proficiency at the first grade level. The authors explain how to obtain the resources used in the study.

In the article presented by Joel Erion, Meghan Ferraro, and Ed Snyder, the critical step of evaluating reasonable suspicion for students experiencing academic difficulties is explored. The authors are school psychologist certified, and provide recommendations that lead to improved services for all students along with effective and efficient use of school resources.

Jason Stragand explores the past, present and future of teacher induction practices through an extensive review of literature. The result is a recommendation to provide programs that 1) support new teachers during their first years of teaching, 2) bridge achievement gaps between new teachers and student outcomes, and 3) decrease the trajectory of teacher attrition.

Jenna Plump presents research to understand exclusionary disciplinary practices, leading to the manifestation of the school-to-prison pipeline. She provides a brief background of racially biased disciplinary practices, and how the use of restorative practices in schools can help reduce discipline disparities and the school-to-prison pipeline.

I hope you enjoy reading through the selection of articles in this edition. Thank you to the team of peer readers and the technical reviewer. Their time, commitment and valuable insight led to the publication of this excellent edition.

As you continue to collaborate within your professional network, please continue to share the publishing and learning opportunities that exist within PASCD.

Mary A. Wolf

Editor of the PEL Journal wolf@pennwest.edu



Enhancing Student Engagement and Promoting Deep Learning: The Benefits of Using Social Learning Platforms

AMML HUSSEIN AND JUAN RIOS

ABSTRACT

This teaching note explores the application of Perusall, an online social learning platform that allows students and instructors to interact with each other and engage deeply with course materials. Implications for the scholarship of teaching and learning are explored through the nexus of online ed tech tools that promote deep learning and student engagement. Specifically, instructors may use Perusall to promote their own data collection and publications, as well as to generate knowledge in the field. Using Perusall's features, instructors create a collaborative learning environment that encourages students to actively engage with the course material and with each other, leading to better learning outcomes. Furthermore, the data collected from Perusall can be used by instructors to improve their teaching strategies and contribute to the scholarship of teaching and learning. Ultimately, Perusall has the potential to revolutionize the way we teach and learn, and can help promote a culture of scholarly inquiry in the field of social work education.

Keywords: Ed tech, deep learning, student engagement, active learning, scholarship of teaching and learning, online learning.

Introduction

Within academia, both faculty members and administrators share a common aspiration: to elevate student engagement and enrich the learning experience, whether through traditional in-person settings or the dynamic realm of online, hybrid, or asynchronous education. This pursuit is underscored by the desire to offer courses that align with professional benchmarks while fostering a vibrant academic environment. In the context of higher education, a pivotal goal is to nurture students' technological literacy and its integration into their learning journey. This teaching paper delves into the practical application of an innovative online social learning platform, Perusall, which was utilized to invigorate student interaction and comprehension of essential course readings. Specifically, this exploration unfolds within the framework of two integral courses – the 3-credit Seminar in Social Work Practice II and the 3-credit Human Behavior in the Social Environment II – both required components of the curriculum at a research institution situated along the East Coast.

Central to this endeavor is Perusall's pivotal role in augmenting student engagement, collaborative learning, and scholarly discourse. By fostering a heightened connection among students and instructors, the platform served a key role in cultivating profound understanding, stimulating dynamic exchanges, and enhancing the quality of academic dialogue between students and the professor. Furthermore, a virtual sense of community emerged among participants of the in-person courses, thereby imbuing the learning environment with a profound sense of camaraderie and enriching interpersonal interactions.

The aspiration to engage students and excite them about learning resonating with the core purpose of education: to equip learners with skills, competencies, and insights that will illuminate their academic trajectory and resonate through their professional careers. In recent times, the educational landscape has been profoundly transformed by the emergence of online tools, each offering opportunities to deepen student involvement and foster holistic learning experiences. Among these tools, Perusall has been embraced by educators spanning diverse disciplines – from Law and Economics (Feinberg, 2020; McFarlin, 2020); Accounting (Zaima & Williams, 2021); Psychology (Bernstein et al., 2021), STEM and Biology (Derting & Ebert, 2017; Seow & Foong, 2018), English and Writing (Tavares, 2023; Zhang & Li, 2023), and Philosophy (Biro, 2021) each attesting to its multifaceted efficacy.

Within this teaching note, the merits of Perusall are examined within the context of social work education. Through our exploration, we were able to promote profound learning, and amplify student engagement, while enhancing pedagogical inquiry. We make the case that Perusall may be used across disciplinary boundaries, positing Perusall as a bridge that connects disciplines, accentuating student involvement and amplifying knowledge retention.

Conceptualized by Eric Mazur, an esteemed Physics instructor at Harvard University, Perusall epitomizes a paradigm shift in the educational landscape. Its design revolves around not only bolstering students' interaction with assigned readings but also affording them the latitude to annotate these materials, exchange queries and perspectives with peers, and solicit feedback from both their peers and instructor. The platform's repertoire of features help empower educators to utilize a rich array of textual and multimedia content, thereby fostering an interactive and collaborative learning milieu. This synergy in multi-media combined with the selected course readings promoted mindfulness, active reading habits, collaborative thinking, and supported critical analysis of the material. Of particular significance is Perusall's role in invigorating student contributions. Students were encouraged to articulate their insights, pose questions, and offer comments

through direct annotations on the assigned reading. The platform bridged the gap between students and course materials. The outcome was a heightened level of engagement and interactivity, enhancing the depth of comprehension and catalyzing the synthesis of ideas. This cycle extended to peer interactions, with students providing feedback that augmented their own grasp of the subject matter. It also permitted students to view multiple perspectives on the subject matter.

The Problem

The propensity for students to skim over or altogether neglect assigned readings poses a persistent concern to educators. Equally pressing is the aspiration to engender more substantive discussions, both within and beyond the classroom setting. The authors embarked on a journey to address these concerns with a vision to shake up the learning experience with thought-provoking discussions, engender deep learning, and forge an online community that transcends physical boundaries of the in-person classroom.

This pursuit required innovative methodology and several adjustments to the traditional syllabus. For example, the authors replaced several assignments which were previously summaries of the required reading each week, and these assignments were replaced with the Perusall activities. An anonymous poll was administered during class, which served as a litmus test for student enthusiasm. The resounding majority exhibited a keen eagerness to embrace this novel technology, signaling a receptive stance to our proposition.

Aims

The authors embarked on a deliberate endeavor, driven by the hypothesis that investing additional time and effort in the integration of online technology could yield a substantial dividend in terms of class time utilization and the quality of discourse surrounding course material. The authors' focus lay on augmenting student preparedness for class. One of our primary goals was to have more students complete the requisite reading prior to lecture. To materialize this objective, the authors harnessed the capabilities of Perusall, which is acclaimed for its role in elevating student engagement, learning outcomes, and academic performance in various educational contexts (Karadag & Baki, 2018). Informed by educators who wield social media platforms as pedagogical tools, this teaching note scrutinizes Perusall's efficacy and recommends its use to promote a participatory learning environment.

We examined the influence of Perusall on facets such as student readiness, in-class discussions, and examination scores. The authors hypothesized that the utilization of Perusall would yield enhanced mastery of the concepts, an enriched interaction with course materials, and more robust classroom dialogues. The empirical testing of this hypothesis offers empirical validation for the efficacy of Perusall in enriching the academic journey of our students.

Implementation

The unfolding of this innovation adhered to a meticulously structured four-phase process.

Phase 1: Conceptualization

During the conceptualization phase, the instructors integrated the course framework into Perusall,

interweaving it with the pre-existing Canvas Learning Management System. Technical hurdles were promptly addressed through the dedicated Perusall helpdesk, ensuring a smooth initiation. The uploading of course readings unfolded across a two-day span. On the first day, all pertinent readings were uploaded in pdf format and integrated in the course within an hour. Subsequently, rubrics and course assignments were anchored within the Perusall ecosystem. The generation of a course key facilitated the dissemination of access to students via a Canvas (learning management system) announcement. Furthermore, the instructors provided a detailed orientation prior to launching the course in Perusall during lecture.

Phase 2: Scaffolding

In this phase of scaffolding, a noteworthy transition was observed. Instructors utilized student annotations as points of reference during class discussions, which resulted in a palpable transformation in interaction dynamics. A heightened engagement of previously introverted students was observed by the instructors. Perusall served as a mechanism to tap into the latent potential of students' insights, questions, and cross-references to external resources. These insights guided the instructors' responsiveness, enabling the creation of targeted learning moments within the classroom setting. The iterative nature of this process facilitated the cultivation of a nuanced, student-centric approach to instruction.

Phase 3: Observation

The observation phase entailed a meticulous recording of student interactions and the manual assignment of numerical grades within the Perusall platform. This approach, while more labor-intensive, offered a comprehensive vantage point for gauging the transformative impact of the innovation, contrasting with the automated grading option that is available to instructors in Persuall. While noting observations, the instructors were also able to utilize the "upvote" feature to recognize noteworthy annotations. This also had the impact of motivating students to contribute to the online discussion beyond the minimum requirements outlined in the assignment rubric.

Phase 4: Evaluation

Culminating the implementation journey was a comprehensive evaluation phase. This stage hinged on the extraction of valuable analytics from Perusall, encompassing an array of data points – annotations, time invested on the platform, and grades – meticulously collated for each course. The richness of this data was exemplified by the respective annotation counts for the two courses: 370 annotations for the in-person Seminar in Social Work Practice II and 799 annotations for HBSE II. These data were used as the basis for this paper.

Our engagement with Perusall yielded not only heightened student engagement but also furnished instructors with a comprehensive array of analytics concerning students' performance. This platform has the ability to empower educators with the capability to effortlessly access reports via excel spreadsheets, which facilitated ease of data collection while affording plenty of data for meticulous observation. These invaluable reports serve as a compass, guiding instructors in the evaluation of student engagement and comprehension, enabling informed decisions for the refinement of teaching methodologies and strategies in subsequent iterations of the course.

Furthermore, the rationale for implementing Perusall is grounded in learning science research,

elevating it to a potent instrument for pioneering innovative educational paradigms. The potential of Perusall spans diverse realms, empowering social work educators to architect, implement, and disseminate their own pedagogical insights through the platform. There are several advantages for using the platform including the ability to pilot novel assignments while easily collecting data and insights.

Benefits to the Instructor

Perusall is an effective course enhancement tool that helps instructors promote deeper learning, critical thinking, and peer interaction among their students. It offers both manual and automatic grading options, giving instructors more control over how they grade student annotations, comments, and linked sources. Instructors can also rate the level of interaction and the quality of each annotation and peer interaction.

Our experience with implementing Perusall in social work education encouraged innovative pedagogy by emphasizing student engagement, academic achievement, course engagement, and online learning perceptions. It can also help instructors promote diversity of thought by facilitating discussions between students with different backgrounds and experiences. Additionally, instructors can use Perusall to conduct research on teaching and learning, and develop evidence-based teaching practices to contribute to the scholarship of teaching and learning.

Furthermore, using digital platforms like Perusall helps enhance student engagement by encouraging student collaboration, and providing personalized learning experiences. Educators may adopt student-centered approaches that incorporate digital platforms, such as social media and mobile learning platforms, to enhance student engagement and promote student-centered learning experiences. By utilizing these tools, educators can create more effective learning outcomes and build more inclusive classrooms. The Perusall platform served as a course enhancement and required prep time for set up, but the return on investment was worth the time commitment. Perusall offers manual and automatic grading options to ease grading, although the authors elected to continue manual grading.

Accessibility

A noteworthy facet of Perusall is its commitment to accessibility. The platform's audio playback feature extends inclusivity to students with learning disabilities, catering to diverse learning styles. Notably, Perusall's data analytics concurrently served as a tool to enhance both engagement and equity, facilitating the measurement of student performance while upholding ethical data collection practices.

Theoretical Rationale and Review of the Literature

The utilization of online ed tech tools such as Perusall finds resounding support within a variety of learning theories including active/generative learning theories, Vygotsky's zone of proximal development theory, cognitive load theory, social learning theory, constructivist learning theories, and the tenets of Universal Design for Learning. Each of these theoretical frameworks underscores the essence of multifaceted engagement, collaboration, and the synthesis of knowledge rooted in past experiences and interactions with the learning environment.

Perusall's role as a catalyst for deep learning is a testament to its efficacy. Through the platform's multifaceted approach, students are prompted to undertake active reading, hone critical thinking skills, and

collaborate harmoniously with peers. The avenue for engagement is rich and diverse, spanning annotations, questions posed to both instructors and peers, and the amplification of discussions within the online community, which are then seamlessly woven into in-person dialogues. This active interaction fuels an elevated comprehension of the subject matter, invigorates student engagement, and fosters a heightened retention of concepts, thereby paving the way for enduring mastery even after the course concludes.

Active/Generative Learning Theories

Drawing upon active/generative learning theories (Chong Lee & May Yeong, 2018; Osborne & Witttrock, 1983; Wood, 2009), Perusall orchestrates an environment where students proactively construct meaning through linkages to external resources and prior knowledge. This process forges critical thinking acumen, intertwining pre-existing cognitive frameworks with concepts embedded within the readings. The convergence of peer insights further enriches this cognitive process, culminating in a profound and multidimensional learning experience. Moreover, our experience with integrating Perusall in the two courses harmonizes seamlessly with Vygotsky's zone of proximal development theory (Vygotsky, 1978), in which we scaffolded learning experiences that extend slightly beyond our students' present boundaries.

Promoting Interaction and Collaboration

Rooted in the tenets of social learning theory (Vygotsky, 1978), Perusall ignited a remarkable wave of interaction among students. The use of Perusall promoted a vibrant exchange of ideas, birthing a dynamic online community that harnessed collective knowledge. The insights garnered within Perusall's virtual realm enriched the learning process significantly, prompting students to delve deeper into the material and contribute substantive annotations. Guided by our established posting guidelines, students not only met but exceeded expectations, which served as a heartening testament to the platform's efficacy in fostering a culture of engagement.

Cognitive Load Theory

The application of cognitive load theory (CLT) further underscores the utility of Perusall as a learning enhancer. Within the purview of CLT, instructional design is paramount, shaping the manner in which information is processed and retained. Our experience with Perusall was that it aligned nicely with CLT's tenets, ameliorating cognitive load through its interactive and multifaceted approach. By furnishing a spectrum of resources that encompass text, images, and sound, Perusall optimally harnesses learners' cognitive capacities, streamlining the learning process.

Learning is most effective when instructional materials are presented in a manner that optimizes the use of these limited cognitive resources (Sweller, 2017). Online ed tech tools like Perusall, which may help reduce cognitive load by providing students with a range of interactive and engaging resources that support learning.

According to CLT, presenting information through multiple channels, such as text, images, and sound, may help learners process information more efficiently. By providing information through multiple channels, learners may engage with the content in a more meaningful way and connect it to prior knowledge, which in turn enhances comprehension. Similarly, our results confirmed prior studies including a study by Moreno and Mayer (2002), which found that the use of multimedia materials, such as a combination of text and images,

improved learner engagement and comprehension. Their results suggest that the use of visual aids helped learners to better organize and integrate the material, leading to improved comprehension. Another study by Sweller et al. (2011) demonstrated that learners who used multimedia materials had better performance on tests than those who did not.

Furthermore, the use of multimedia materials may also provide learners with more opportunities to practice and apply what they have learned. By integrating videos, interactive quizzes, and other multimedia materials, instructors provide learners with a variety of ways to practice and apply what they have learned, which helps to improve their retention of the material.

The use of multimedia materials in teaching supports cognitive load theory by promoting learner engagement and comprehension, as well as providing learners with opportunities to practice, rehearse, and apply what they have learned.

Social Learning Theory and Constructivist Learning Theories

Perusall emerges as an enabler of active collaboration and peer-to-peer discussion, harnessing the communal dimension in the learning journey, which is supported by social learning theory. Moreover, Perusall's capabilities also align with constructivist learning theories, which posit that learning takes place through the active construction of knowledge rooted in prior experiences and environmental interactions. Here, the platform serves as a medium for learners to apply and contextualize their knowledge within real-world scenarios, fostering a holistic and experiential approach to learning.

Learning is an active process that involves the construction of new knowledge based on prior experiences and interactions with the environment (Anderson, 2007; du Plessis, 2020; Sizemore & Marcum, 2008). From a constructivist perspective, learning is a social activity. Online ed tech tools like Perusall facilitate constructivist learning by providing students with opportunities to engage in active learning experiences that require them to apply their knowledge and skills in real-world contexts.

Universal Design for Learning (UDL)

The use of ed tech tools like Perusall is consistent with the principles of Universal Design for Learning (UDL) (Alqurashi, 2019; Burgstahler, 2015; Meyer, Rose, & Gordon, 2014; Novak & Rodriguez, 2023; Scott et al., 2003) which emphasizes the importance of providing multiple means of representation, expression, and engagement to accommodate the diverse needs and preferences of learners. By affording students diverse avenues of interaction with course materials, Perusall contributes to the realization of UDL's foundational principles. This multiplicity of engagement modes not only accommodates diverse learning styles, but also resonates with the essence of inclusive education, thereby amplifying the impact of the learning experience. Perusall provides students with multiple ways of engaging with course materials, which can help to enhance learning outcomes for a wide range of learners.

Student Performance

Prior studies have demonstrated that using Perusall can improve student performance (Cui & Wang, 2023; Li & Li, 2020; Rambe & Bere, 2013; and Evans & Lunt, 2020). More specifically, Rambe and Bere (2013) found that students who used Perusall had higher exam scores and were more likely to participate in class discussions. Additionally, there were several features and functionalities that promote its versatility across disciplines.

Features & Functionality

Perusall has several features that benefit both students and instructors. One such feature is the e-reader, which includes a playback button that accommodates audiovisual learners and students with intellectual disabilities. The instructor uploads the required PDF reading assignments in the Perusall course, and students click an icon to have the article read to them, highlighting and annotating the text as they advance through the assigned reading and assignments. Instructors have the ability to provide detailed instructions for each assignment, post a rubric, and for this pilot study, we instructed students to post three original annotations and two responses to their peers' posts.

Another feature in Perusall is the tagging capability that permits both students and instructor to tag individuals in the group and pose questions, alternative perspectives, or comments using the @ symbol followed by their name, similar to the process used in social media outlets. The instructor has the ability to review and respond to student comments, clarifying concepts and promoting engagement with the course materials.

Finally, Perusall offers an "upvoting" feature that allows instructors to recognize excellence or insightful posts. By promoting a student's post, the instructor signals to the class that the post is particularly noteworthy, encouraging further discussion and engagement. In our experience, this feature encouraged students to share their thoughts and feelings about course material, resulting in deeper interactions with the learning materials.

Discussion: Enhancing Student Engagement and Learning Outcomes with Perusall

The implementation of Perusall yielded a plethora of tangible benefits, amplifying various dimensions of students' academic journey. Our exploration revealed that Perusall augmented students' reading engagement, academic achievement, course involvement, and perceptions of online learning. Moreover, its efficacy extended to nurturing collaborative learning, critical thinking, and fostering peer interactions. This versatile tool found efficacy not only within traditional classroom settings but also within the realms of flipped classrooms and online courses, manifesting its adaptability and relevance across diverse educational landscapes.

Fostering Multidimensional Exposure and Enrichment

Perusall extended the horizons of student engagement, enabling global connections to the weekly course concepts. The platform's flexibility encouraged students to incorporate videos and multimedia that harmonized with the course material, culminating in a multi-faceted exploration of subject matter. This holistic approach enriched the overall dynamics of the courses, infusing them with a heightened vibrancy and relevance. For example, some students connected the required reading to a TED talk that they had previously watched. Another student referenced dynamics at Amazon that connected to the material from the module and applied the organizational theories to explain what was happening in the context of Amazon and employee safety.

Scholarly Engagement and Research Integration

Perusall can also be used for scholarly engagement, not only within the confines of the classroom but also beyond its borders. Instructors wield this tool to spur student-led research, leveraging annotated readings as stepping stones to in-depth exploration. Furthermore, Perusall's potential for facilitating pedagogical research empowers educators to glean insights into teaching and learning paradigms. This, in turn, promotes an evidencebased approach, ultimately enriching the scholarship of teaching and learning while bolstering instructors' portfolios.

Reflecting on the Journey

Our encounter with Perusall bore testimony to its transformative impact, prompting us to recommend its integration into diverse academic spheres. The resonance of deeper learning, critical thinking, diverse thought, and scholarly engagement paints a vivid picture of Perusall's potential in nurturing well-rounded and proficient social work professionals. Self-awareness is an essential and key aspect of social work practice. Integrating self-awareness into social work practice has a significant impact on promoting healthy relationships and interaction between social work professionals and clients (Rios, 2022). Our experience affirmed the efficacy of this ed tech tool in enriching instruction, comprehension, engagement, and overall course performance outcomes.

In the pursuit of fostering an elevated learning experience, our journey with Perusall illuminated a profound shift in students' engagement with assigned readings. The platform's integration facilitated a depth of engagement that surpassed prior semesters, elucidating the power of interactive technology in elevating the learning process.

Successful Implementation and Future Avenues

The seamless implementation of Perusall was buoyed by comprehensive guidance, instructions, and instructor led simulations. Students' initial hesitancy was swiftly dispelled as they were provided with a clear roadmap, resulting in smooth access to the platform. Perusall's compatibility with various learning management systems, including Canvas, permitted accessibility, making it a potent ally in modern educational settings. The cost-effective nature of Perusall for reading course materials, coupled with the potential utilization of open-source texts, underpins its role in promoting affordability and accessibility. Moreover, the platform's ability to facilitate student-generated connections to external content not only augmented engagement but also nurtured perspective-taking skills, a cornerstone of social work education.

A Call to Embrace Digital Engagement

Our immersion in the Perusall experience echoes the broader insights of digital platforms' potential in higher education. Scholars like Rambe and Bere (2013) and Li and Li (2020) highlight the power of digital tools in enhancing student engagement through active learning, personalized experiences, and collaborative endeavors. There is some level of confidence that emerging technology can help promote social change (Rios, 2022). The applicability of these findings within social work education underscores the value of embracing digital platforms to cultivate inclusivity, active learning, and deeper engagement.

Cultivating Lasting Learning Outcomes

The application of Perusall in our social work courses helped us witness its capacity to bolster learning outcomes. Through an interactive and collaborative milieu, Perusall fueled heightened engagement with course materials, transcending boundaries between students and the instructors. This dynamic interaction facilitated meaningful feedback and discussions, thus elevating the overall learning experience. The potent blend of active learning and collaborative environments fortified Perusall's role in cultivating not only academic prowess but also critical thinking acumen and multidimensional comprehension.

Perusall's realm extends into the domain of critical thinking, catalyzing robust discussions and fostering independent ideation. The platform's prowess in accommodating multimedia allowed students to draw connections beyond the prescribed materials, enriching class discussions and honing their analytical faculties. The interplay of diverse media invigorated conversations and amplified the pedagogical impact.

Generating New Knowledge and Scholarly Contributions

Perusall presents a versatile tool not only for enhancing student learning but has significant implications for instructors to embark on scholarly pursuits within the realm of education. Moreover, instructors are often limited in time to collect data while teaching, preparing lesson plans, lectures, and grading, which can make data collection a challenging endeavor during the course of the semester.

Instructors can harness the wealth of data Perusall generates, delving into patterns of student engagement, comprehension, and performance while teaching. This data-driven approach empowers instructors to refine their teaching strategies and optimize student learning outcomes. For instance, Perusall's data can unveil areas where students grapple, allowing the instructors to tailor their teaching methods for enhanced clarity in subsequent iterations of the course.

In addition, Perusall integration aids instructors in disseminate their own research findings to the educational community. The abundant data on student reading behaviors, annotations, and discussions paves the way for publications delving into topics like student learning patterns and instructional design. The potential to investigate the effects of diverse reading assignments on engagement and performance using Perusall-generated data opens a new avenue for impactful educational research.

Nurturing Scholarship of Teaching and Learning

This pedagogical approach is firmly anchored in evidence-based practices, poised to be shared and championed amongst student peers. Prior studies highlight Perusall's potential to foster peer interaction, critical thinking, and digital literacy, all pivotal components of the scholarship of teaching and learning (Hinrichs et al., 2021; Hsiao et al., 2019; Kim et al., 2020). This collective pursuit of advancing educational methodologies holds promise for the continuous evolution of social work education.

Conclusion: An Evolution in Learning and Engagement

The infusion of Perusall into course assignments contributed a profound cognitive synthesis of course materials among students, a dimension unexplored in prior course iterations. A particularly positive outcome was the newfound avenue it provided for more introverted students to engage actively in class. The platform's unobtrusive nature allowed these students to voice their perspectives comfortably, a significant boon, especially post-COVID-19 when in-person participation might seem daunting.

Collaborative learning, nurtured by Perusall's framework, facilitated interactions, discussions, and thought-provoking queries that transcended conventional methods. It bridged gaps between theoretical constructs and personal experiences, fostering meaningful connections that enriched the learning experience. Furthermore, the platform's digital community united students together, enhancing their social networks and nurturing a space for in-depth evaluation of diverse viewpoints.

Perusall's benefits extend beyond individual insights, catalyzing the exploration of themes within a broader context. Students were able to make global and local connections using the annotation feature including juxtaposition of organizational practices at Amazon with personal experiences in the U.S. military exemplifies the platform's role in igniting multidimensional discussions in the online community. The resulting conversations, imbued with critical evaluation and robust debate, invigorated the learning process and deepened students' understanding both inside the classroom and the virtual classroom space.

In summary, Perusall stands as a potent catalyst for deep learning, heightened engagement, and the flourishing of the scholarship of teaching and learning. Its deployment fostered an interactive, collaborative, and dynamic learning environment that fueled active reading, critical thinking, and knowledge sharing among students. This approach empowers educators to bridge the gap between traditional and innovative pedagogical methodologies.

A Transformative Pedagogical Journey

Our journey through the realm of Perusall's interactive technology underscored its transformative potential. As we reflect on its integration, we wholeheartedly advocate for its adoption across a broad spectrum of social issues at both undergraduate and graduate levels. Beyond the confines of social work, Perusall's impact exemplifies the synergy between evolving teaching modalities and the multifaceted needs of modern learners.

In conclusion, Perusall emerges as an innovation that seamlessly melds technology with pedagogy. It stands as a testament to the possibilities that lie at the intersection of education and technology, reshaping the contours of engagement, learning, and scholarship. Our encounter with Perusall was positive and reinforced the transformative potential of digital platforms, echoing a resounding call for educators to embrace the digital frontier to nurture a new generation of adept and engaged learners.

Recommendation and Future Prospects

Reflecting on our experience, we endorse the integration of Perusall to elevate student engagement and interaction with course content. The platform's capacity to crystallize concepts and facilitate diverse perspectives enriches the educational journey. Our pilot project's resounding success in two undergraduate social work courses underscores Perusall's potential in fostering an online sense of community and invigorating student-instructor interactions.

As dedicated social work educators, we champion the adoption of Perusall to invigorate pedagogical practices. It provides a fertile ground for instilling a deeper understanding of course concepts while nurturing a collaborative spirit. By promoting multiple angles of exploration through annotations, Perusall paves the way for a comprehensive and enriching educational experience, benefiting students and educators alike.

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An Analysis of Emergent Reader Understanding of Words and the Impact on Reading Proficiency

AILEEN P. HOWER AND GERALD L. FOWLER

Abstract

This action research study examines the possible relationship between a student's understanding of the spoken word and written word, and the impact on their progress towards reading proficiency. According to Linnea Ehri, determination of this relationship may have implications for adjusting literacy instruction to meet student needs. To this end, the study looked at first grade students' responses to an exercise that tasked them to match printed words with those implied using oral language and the possible effects this ability had on their success in becoming proficient readers. Results suggested that assessing this ability may be more appropriate in kindergarten due to this skill still developing at this age, although assessing it in first grade may still help identify a small number of students who may be laboring at the emergent literacy stage.

Keywords: beginning readers, concept of word (COW), reading proficiency, reading development

Introduction

Do beginning readers have a conceptual understanding of the printed word when they enter first grade? As Brown (2014), Ehri (1995), and others suggest, students can come to school with an unclear understanding of what printed words represent and some students continue to struggle to meet commonly recognized milestones as the school year unfolds. It also appears that, in most cases, students who understand the concept of a printed word (COW) are more inclined to develop reading proficiency as they move through the grade 1 curriculum; that is, their ability to establish a one-to-one correspondence between what they say and how it looks in print appears to be related (Blackwell-Bullock et al., 2009).

The Road to Becoming a Reader

When students enter first grade, they bring a variety of background experiences and skills that teachers use to determine possible stages of development in both spoken and written language (Brown, 2014). In fact, the range of skills that students bring to the first-grade classroom is immense. For example, some students are reading short chapter books and decoding printed words with vowel teams, whereas others are unable to list all the letters in the alphabet (Invernizzi et al., 2017). For those without strong phonological awareness or a basic COW, even reading a word like "yes" and adding it in their sight word vocabulary can be a daunting task (Ehri, 2014).

In fact, their journey to literacy is not unlike the overall journey of the human civilization's evolution from its early stages to literacy's present form today. Written alphabetic language began to emerge around 3400 B.C. Surprisingly, to the casual observer, first attempts in some of the precursors to present language's printed manuscripts left out the spaces between words. After all, we don't pause between words when we speak (Saenger, 1997). Why should we when we write? It is the listener who infers the spaces, not the speaker. Gradually, as written language developed, scribes and translators began to place spaces between words as they wrote them down. Sorum (2019) suggests that today's youngest students may experience a similar transition as they develop an understanding of the one-to-one relationship between what is said and what is written. Knowing that words make up our spoken language and that their matching counterparts in print need to be orthographically recognized is at the core of becoming a proficient reader. It marks the stage when students are shifting from focusing on oral language and phonological awareness to alphabetic knowledge. According to Blackwell-Bullock et al. (2009), "Students with [only] a developing understanding of COW in text [may] lack automatic letter recognition, letter sound knowledge, and how these coordinate with the beginning sounds of words in text. In short, these students are missing the speech-to-print match" (p. 32). Without a strong COW as it appears in print, students cannot progress toward decoding aka reading proficiency. This COW should be in place by first grade (Ehri, 2005).

About This Project

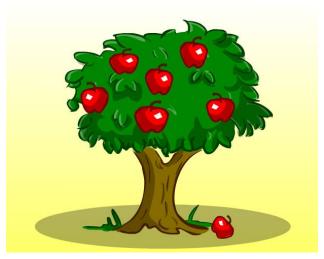
This action research project set out to determine to what extent a student's performance on the COW exercise suggests that it could be used as an early indicator of reading difficulties. Due to the challenges of working with students and their teachers during the height of the COVID pandemic, an action research approach was used to add more flexibility and options when data collection issues arose. According to Clark et al. (2023): Action research is an approach to educational research that is commonly used by educational practitioners and professionals to examine, and ultimately improve, their pedagogy and practice. In this way, action research represents an extension of the reflection and critical self-reflection that an educator employs on a daily basis in their classroom. (p. 3)

Students were selected using a form of convenience sampling. That is, they attended school districts from the same region and all participating teachers were volunteers. Parents also had the opportunity to opt-out their students from the exercise. In addition to collecting data related to student responses to the COW exercise, teachers and/or administrators from each district, as availability permitted, also participated in conferences to make adjustments, to discuss the results, and to share their thoughts on why students performed as they did.

The Falling Apple Exercise

Students were given a worksheet that asked them to follow a direction to identify a word, any word, in print from a sentence that was read to them orally. The sentence also appeared on a worksheet that included a picture. The sentence described an action (an apple that fell from a tree) that was implied in the picture. (See Figure 1).

Figure 1 *Activity Sheet*



The apple fell from the tree.

Note. The graphic was obtained on Pinterest. The author created the activity sheet.

Students could circle any word in the sentence to demonstrate their understanding of what a printed word looks like. Afterwards, teachers shared the results with the researchers via an excel spreadsheet using numbers for each student for which data was collected. The activity sheet was returned to students per the permission that was sought, so teachers/parents could see what their students circled and discuss the significance, if applicable.

The activity was completed during the first month of the school year. Only those who could not identify a word in print were required to repeat the exercise using the same worksheet during the following winter or early spring of the same school year. At the beginning and for students who were required to complete the follow-up exercise later in the school year, teachers rated their students' reading proficiency level based on district literacy assessments and/or observations of student performance. The following labels, developed by Ehri (1995), were applied to indicate what phase of reading matched a student's developmental stage:

- 1. Pre-alphabetic or partial alphabetic
- 2. Full-alphabetic
- 3. Consolidated alphabetic

A student rated at the pre- or partial alphabetic phase (PPA) suggested that they read words by remembering their visual features or guessing words from context. Students who could recognize some letters of the alphabet and could use them together with context to remember words by sight were noted as being in the full-alphabetic phase (FA). The consolidated-alphabetic phase (CA) was reserved for students who had a strong working knowledge of the alphabetic principle and used it to analyze connections between letters and sounds in words (Ehri, 1995).

Results

Approximately 660 students across five school districts participated in the fall of the 2021-2022 school year. All districts but one were suburban school districts located in south central Pennsylvania. District A had a low income rate of 48.8%; District B of 38.5%; District C (an urban district) of 76.9%; District D of 33.3%; and, District E of 36.2%. Individual student responses were recorded and analyzed (See Tables 1-3).

Fable 1 Fall 2021	Data		Table 2Spring 2022 Data			Table 3 Variance (2022-2021)			
Levels	Total	Total	Levels	Total	Total	Levels	Total	Tota	
Level 1	290	43.9%	Level 1	248	37.7%	Level 1	-42	-14.59	
Level 2	235	35.6%	Level 2	227	34.5%	Level 2	-8	-3.4%	
Level 3	136	20.6%	Level 3	183	27.8%	Level 3	47	34.6%	
Total	661	100.0%	Total	658	98.5%	Total	.3	-0.5%	

Based on their responses to the "The Falling Apple Exercise" near the beginning of the school year, (43.9%) students appeared to be at the (PPA) phase, (35.6%) at the (FA) phase, and (20.6%) were rated as consolidated alphabetic. In the spring, students who were not able to identify a word in print at the beginning of the school year were asked to repeat the "The Falling Apple Exercise." Only 15 students, or 2% of the total number of participants in the study, were still unable to identify an individual word in the sentence that appeared at the bottom of the page. The results suggested that most of these remaining 15 students were still functioning at Levels One and Two in the spring of 2022. Only one student at Level Three was unable to identify a word in print. (See Table 4).

Table 4Printed Word Concept

Student	
At Risk/Level 1	9
On Track/Levels 2,3	6
Total	15

Teacher/Administrator Interviews

Although not required, three of the participating districts provided background information about factors that might explain the results for the students who participated. (See Table 5).

Table 5

District Insights

Districts	Notes from observations directly shared by district administrators
District A Total Number of Students Participating: 112	Only one student was unable to demonstrate understanding of the COW in the spring. This district has full-day Kindergarten for all students. There is a strong emphasis on pre-school and Head Start programs and students went back to "in person" instruction in late March after the start of the pandemic with them attending school four days a week. Additionally, the teachers self-selected to participate in the project.
District B Total Number of Students Participating: 89	We started with 75.8% of students able to identify the COW. 83% of those students were rated as being in the pre-alphabetic phase. In the spring, over 95% of all students were able to identify a word. This district has full-day Kindergarten and implemented a structured literacy approach. This district had the highest number of students in poverty, significant attendance issues during online learning (during the pandemic), and reported that many parents were over helping with work when students were at home.
District C Total Number of Students Participating: 241	This district had only two students in total who did not identify a word by spring. They shared that despite the pandemic, students had full day Kindergarten throughout the year before their first-grade year. Additionally, the district invested in training all registered pre-schools located within its boundaries in a structured literacy approach. Finally, throughout first grade, students were taught using a structured literacy approach.

Delimitations of the Study

The study included 661 first grade students from a relatively small geographic location in south central Pennsylvania. Based on the results, the researchers suggest that choosing kindergarten students may provide school districts more useful information in using COW as a milestone predictor.

Summary and Recommendations

This project was conducted during the 2021-2022 school year with 661 first grade students spanning five school districts during a time when they were still adjusting programming due to the impact of the COVID pandemic. Despite the overwhelming challenges, the five participating districts agreed to press on and each helped the researchers develop workarounds that allowed for data to be gathered with only minimal disruptions to their programs.

All participating students completed the "The Falling Apple Exercise" to determine if they could identify a word in print. Teachers also rated their students' developmental reading stages as a part of the data collection. As suggested in Table 1, there were several students entering first grade who did not appear to have a clear understanding of the COW in print. However, as shown in Tables 2-3, most students progressed from a Level 1 reading stage to Levels 2 or 3. Despite this overall improvement, 15 students were still unable to demonstrate an understanding of the COW in print by late winter or early spring. Of those 15, nine remained in the pre- or partial alphabetic phase (see Table 4).

In addition, when asked to reflect on the data that was collected in the fall, three district representatives provided additional observations. Their reflections added possible insights as to why students may have fallen into certain patterns and/or why these may have changed over the course of the school year. In some cases, they attributed details about the school climate, structure, and programming prior to students' first grade year that might have had an impact on the patterns.

The results show that there appeared to be a positive trending relationship between students who were rated by their teacher as Level 1 readers and COW. In the fall, in District A, of the 2 students who were not able to express COW, 50 percent were identified at a Level 1 developmental stage. In District C, 92 percent of the students who were not able to identify a word were listed as at a Level 1 developmental stage. In district D, the number was also 92 percent. District E, of the 21 students who were not able to express COW, 67% were identified as at Level 1 developmental stage. Supporting this observation inversely, in District B, no student was unable to identify a word. Of their 62 students who are not in possession of COW are also those students who teachers see as exhibiting fewer reading readiness skills than their peers of the same.

Despite the qualitative nature of the study and the threats introduced by COVID related adjustments, classroom teachers could easily confirm any potential relationships between student performance and the COW exercise. As a result, it appears that the exercise could provide teachers with vital information as a red flag early in the school year so that they can make instructional adjustments. For example, responses on the COW exercise may alert the teacher to a need for more intensive language exercises to address a student's developmental needs as a supplement to the more traditional approaches to literacy instruction. While there are other assessments that note a student's COW, such as Really Great Reading's Kindergarten Screener, none are as quick to administer or focused exclusively on COW as "The Falling Apple Exercise."

For students who need additional experiences to develop an understanding of the relationship between oral and written words, the Language Experience Approach (LEA) (Fisher & Frey, 2020) may also be useful. LEA is an activity where students orally dictate a story to a teacher who records verbatim what the student has said. This shows a student their speaking in print explicitly, which aligns to modeling how each word spoken

is written with spaces placed between each word. The student then uses this writing as a reading resource, as it is based in their background knowledge and vocabulary. It also appears that this activity could be more beneficial by focusing on kindergarten students and tracking their progress through the end of first grade. It could be helpful in early detection of students who could potentially struggle with reading in successive grades. It would be important to follow up with the students at Levels 2 and 3 who did not identify a word to see what implications this has had on their reading achievement. Finally, regardless of the instructional approaches used to help students learn to read, the interpretation of the data collected reflects that a student's understanding of the COW in printed language may be useful as an early marker to identify those who are at risk and may struggle in their development of reading skills.

Note: The materials used in this study (organized in the form of a handbook) will be made available for the asking with just a few conditions to protect copyrights, and other aspects of the administration of the exercise and reporting out the result. The handbook also includes an overview of the purpose of the exercise, operational definitions of terms, and sample letters to explain the purpose of the exercise to parents and school officials.

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Evaluating Reasonable Suspicion: An Opportunity to Improve Collaboration

JOEL ERION, MEGHAN FERRARO, AND ED SNYDER

Abstract

Although the role of a school psychologist varies greatly from school to school, special education evaluations are a core responsibility for most practitioners. Evaluating reasonable suspicion for students experiencing academic difficulties is a critical step at the initial stage of the special education evaluation process, one that receives limited attention in special education law and peer-reviewed literature. The process of evaluating reasonable suspicion may be particularly challenging for schools using traditional referral processes versus utilizing multi-tiered systems of support (MTSS). Following a review of legal background, professional writing, and research, this article provides practice recommendations for team-based decision-making, communication and collaboration with parents/guardians when evaluating reasonable suspicion. The goal of these recommendations is improved services for all students along with effective and efficient use of school resources. Suggestions for future research are noted.

Keywords: child find, multi-tier systems of support, parents, reasonable suspicion, special education evaluation

Introduction

Since the inception of IDEA, the single most common activity for school psychologists is taking part in the special education evaluation process (Bramlett et al., 2002; Lacayo et al., 1981). School psychologists may be found assisting with child find, classroom observation, interviewing families, direct assessment, report writing, relaying assessment results to teachers and families, and IEP (Individualized Education Program) development. Special education evaluation activities remain central to the work of school psychologists despite decades of emphasis on role expansion and increasing interest and participation in multi-tier systems of support (MTSS) (Conoley et al., 2020). For example, in Pennsylvania, a state with a long history of supporting prereferral problem-solving teams, only 3 percent of schools are approved to use an MTSS-related approach to identify a specific learning disability (Pennsylvania Training and Technical Assistance Network, 2020). Considering this professional landscape, most school psychologist practitioners need a special focus on individual and systems-level consultation as an adjunct to conventional special education evaluation procedures, including evaluating reasonable suspicion. With their extensive experience in areas as diverse as individual assessment, data analysis, behavioral intervention, academic intervention, and program evaluation, school psychologists are in a unique position to consult with teachers, families, and administrators on each step of the special education evaluation process and help move districts to an increasingly effective system of service delivery positively impacting all children.

The focus of this article is the earliest stage of the special education evaluation process, the evaluation of reasonable suspicion for children experiencing academic difficulties. Though much of the underlying guidance is similar, determination of reasonable suspicion for behavioral and low incidence exceptionalities is beyond the scope of this article. Our goal is to note specific opportunities at this stage of the special education evaluation process for individual and systems-level consultation. This article is not meant as legal advice. School psychologists should always first follow federal and state laws and the advice of their district solicitor. We begin with an examination of background information.

Legal, Regulatory, and Scholarly Guidance

Prior to pursuit of Permission to Evaluate (PTE), the school decides whether a special education evaluation is warranted (i.e., reasonable suspicion) (Zirkel, 2017; Zirkel 2020). IDEA (Individuals with Disabilities Education Act) (2004) and the subsequent IDEA regulations (2006) make no direct reference to reasonable suspicion thus leaving the search for interpretation to court decisions. Zirkel (2017, 2020) reviewed judicial case law related to the "child find" requirement of IDEA, including decisions about reasonable suspicion of a disability and determining need for special education services. Most court judgements were in favor of choices made by schools. The decisions by schools were multifaceted with no single factor (e.g., grades, absenteeism, or standardized test results) determining a school's choice about proceeding with an evaluation. Zirkel notes that while case law provides a legal minimum requirement, professional norms may require a response favoring proceeding with an evaluation. The "school psychologist [emphasis added] should play a central and leading role" (2020, p. 32).

Like special education law, regulations, and related court decisions, scholarly literature provides limited direct guidance for determining reasonable suspicion. A search of eight databases (Academic Search Ultimate, Education Source, ERIC, Legal Collection, Open Dissertations, PsycArticles, Psychology and Behavioral Sciences Collection, and PsycInfo) for 1975 through 2022 using the keywords: reasonable suspicion, need for

evaluation, screening for special education, and child find, yielded a limited number of articles illuminating the current discussion. Three were authored by Zirkel (2015, 2017, and 2018) and one was coauthored by Zirkel (Betesh et al., 2012). Two of these publications have already been reviewed for the current article and the others provide comparable information regarding judicial decisions related to reasonable suspicion.

Building on Zirkel's (2015) review of case law related to child find, Ennis et al. (2017) arrived at similar conclusions. School districts declining pursuit of special education evaluations based on a single variable (e.g., regular grade promotion, passing grades, and high cognitive ability) was seen as problematic. Districts employing Response to Intervention (RTI) in a manner closely evaluating student progress and providing additional intervention as needed, were deemed compliant with special education law. Districts purporting to use RTI but in a manner that delayed special education evaluation without adequate hope of intervention related progress were deemed out of compliance with special education law. As additional support for this approach, the authors directed the reader to a memo from the director of OSEP (Office of Special Education and Rehabilitative Services) noting that the RTI process not be used to "delay or deny" eligibility determination (Musgrove, 2011, p. 1).

Ennis et al. (2015) states that these delays can be avoided and child find enhanced when schools regularly (e.g., every 6 weeks) employ multidisciplinary teams to review student needs, interventions, and progress. And the authors state that while class and grade-level teams and processes are a standard function of RTI, schools without such procedures should employ them (Ennis et al., 2017).

The previously noted legal and regulatory guidance on making reasonable suspicion decisions is similar to that used for special education evaluations. For example, the Individuals with Disabilities Education Act (2004) as noted in 20 U.S.C. §1414(b)(2)(B) and the Professional Standards of the National Association of School Psychologists (NASP, 2020a) as noted in Standard II.3.3, state that assessment employ multiple types of data from multiple sources. In the case of academic skills, this could include grades, group achievement test results, teacher observations, curriculum-based measurement (CBM), student work, and parent input. If a school employs MTSS with an academic focus, regularly obtained basic skill screening information, in combination with other classroom-based information, may provide adequate grounds for evaluating reasonable suspicion. In contrast to the more traditional use of teacher judgement, records review, and evaluation of student work for determining reasonable suspicion of an academic disability, the screening measures employed in MTSS have well-established psychometric properties. Some of the widely used systems in reading include AIMSweb (Shinn & Shinn, 2003), DIBELS Next (Good et al., 2011), easyCBM (Anderson et al., 2014), and Illuminate Learning (2021). MTSS also possesses extensive literature (Jimerson et al., 2016; Kovaleski et al., 2023) on data collection, problem analysis, and decision making, all of which offer a good framework for the recommendations we propose in this article. As noted earlier, the focus of this article is on academic difficulties. In addition to the previously described legal guidance, IDEA strongly infers but never directly addresses that consideration of reasonable suspicion be a team process (34 CFR §300.321). Teams are the driving force for all important special education decisions including determination of eligibility, individualized education programs, behavior intervention plans, and transition plans (Jacob et al., 2022). Members may even be designated by role (e.g., general education teacher, local education agent (LEA), parent and/or guardian). In light of this legally recommended approach to making other important decisions about special education services, the determination of reasonable suspicion should also be a team decision with input from the student's teacher(s), the LEA, the school psychologist, and the parents and/or guardian.

Initial consideration of reasonable suspicion typically originates with those individuals who regularly

interact with the student (i.e., the teacher(s) or the student's parents and/or guardians) (34 CFR §300.111). The impetus for initiating a consideration may vary depending on knowledge of assessment and special education, personal philosophy of education, availability of problem-solving teams, and experience with special education services. The result is a great deal of variability. Based on many decades of school-based experience, the authors have worked with a few teachers who rarely, if ever, broach the idea of a special education evaluation and a few teachers who annually refer substantial portions of their classes for special education or see the special education evaluation as the only means of addressing their concerns. Review of available screening information and knowledgeable analysis of information by school and parent teams holds the promise of bringing needed services to students in a timely fashion and building more collaborative and beneficial relationships with parents/guardians. It may reduce the likelihood of unnecessary special education evaluations, a time-consuming and resource-consuming process that detracts from beneficial practices at the universal (i.e., class-wide) and targeted levels.

For those school psychologists working in a district without MTSS (i.e., schools using Teacher Assistance Teams or more traditional informal processes), the result may be less helpful to students, teachers, and parents/guardians. This type of less structured approach to addressing student needs may be similar to concerns mentioned by Kovaleski et al. (2023) regarding referral procedures for special education services prior to the implementation of IDEA 2004. Without MTSS, there may be uneven communication between families and school staff about student performance. Standards of reasonable suspicion may vary among teachers and other support personnel. The school psychologist may become the default gatekeeper to special education evaluation and referral procedures for special education evaluation and referral procedures for special education evaluation. In schools without MTSS, there may also be considerable variability with identification and referral procedures for special education evaluation, and an inefficient application of special education evaluation resources. Without MTSS, there may be missed opportunities for improving universal instructional services.

The purpose of this article is to provide school psychologists and their partners (i.e., teachers, administrators, and parents/guardians) with guidance for evaluating reasonable suspicion with the goal of delivering improved services to all students and channeling resources more effectively. As previously noted, federal law and regulations do not specify procedures for handling reasonable suspicion (34 CFR §300.111). Scholarly literature is lacking on the practice of reasonable suspicion. In contrast, there has been a substantial expansion of scholarly literature on MTSS (e.g., Gonzalez et al., 2022; Kovaleski et al., 2023). An important focus of MTSS is on the earliest stages of the special education evaluation process including screening, problem solving, resource allocation, and assessment of the instructional environment (Brown-Chidsey & Bickford, 2016; Schaffer, 2023). Though designed for a comprehensive system of service delivery, MTSS has features that can be used to effect, in more informal, ad hoc traditional systems of evaluating reasonable suspicion (Kovaleski et al., 2023).

Influences on Team Process

Teacher Referral, CBM, Problem Validation Screening, and Classwide Intervention

Research shows a strong relationship between teacher judgement of level of academic performance and more psychometrically established and standardized measures of academic performance including normreferenced group achievement tests (Kaufman, 2020) as well as CBM and special education eligibility decisions for high-incidence disabilities (Marston et al., 1984; Shinn et al., 1987). The strength is such that one author notes that the teacher is the test, asserting a general equivalence between teacher judgement and achievement tests/special education evaluation decisions (Gerber, 2005). However, when teams examine reasonable suspicion and rely primarily on teacher judgement, the team may devolve into a perfunctory, "rubber-stamp" function. It also leads to the question of whether a meeting is needed when the decision to proceed with a special education evaluation is based primarily on one source of information. While teacher referral provides a common starting point for a team evaluating reasonable suspicion, as noted earlier, professional guidelines, judicial findings, and law point to the need for multiple types of assessment and multiple sources for important special education decisions (Jacob et al., 2022).

Another caveat to teacher referral is that some non-academic variables (e.g., behavior, sex, and race), have an impact on teacher judgement. As noted by Shinn et al. (1987), "Teachers are both accurate and biased in the referral process" (p. 16). Use of CBM in conjunction with teacher judgement provides teams with an opportunity to directly assess basic academic skills with the hope of directing resources to the correct issue(s) rather than focus only on a global "instructional tolerance" of students that underlies teacher judgement (Gerber, 2005, p. 516). These biases may result from the impact of behavior, likeability, and demographics (Marston et al., 1984; Shinn et al., 1987) as well as sex and comparative judgements related to overall performance of the student's classmates (VanDerHeyden & Witt, 2005).

An important advance to screening of students for potential special education evaluations is having students actively engage in brief dynamic assessments designed to evaluate motivation and skill acquisition. Problem Validation Screening (PVS) (VanDerHeyden et al., 2003) utilizes CBM probes, the introduction of a reward to assess motivation, and the use of a brief instructional component to assess skill acquisition. Using a variety of criterion measures, PVS had much better predictive power than teacher referral. This predictive power of PVS versus teacher referral increased when examining low-achieving versus high-achieving classrooms, and male versus female students (VanDerHeyden & Witt, 2005). The authors reported that PVS can be efficiently employed requiring 45 minutes to screen a class and an additional 5 minutes per student to complete follow-up assessment.

As part of the expanding research and utilization of MTSS, a change in the understanding of the earliest stage (i.e., universal) is the inclusion of a process described as Tier 1.5 (Kovaleski et al., 2023). The original focus of Tier 1 is the provision of a standards aligned, research-based curricula implemented with fidelity and for an adequate part of the school day. This supplemental approach is implemented with classes which have a median class score in the risk range or below a predetermined standard. It utilizes brief peer-assisted classwide instruction in reading, writing, and/or mathematics for approximately 15 minutes per day for two weeks. In addition to improving overall class achievement, it provides information about which students should be considered for more focused intervention (NASP, 2020c).

Parent Comprehension and Emotional Response

When parents/guardians are brought into the special education evaluation process, they may feel overwhelmed with information, concerned about their child's performance in school, and possibly distressed by the school suspecting that special education services may be needed. There is a lack of professional literature providing information about engaging families at this early stage of the special education evaluation process. Educators should consider potential parental emotional reaction and parental comprehension of the process (Haley et al., 2013). Referencing the work of Kubler-Ross (1969), Haley et al. (2013) interviewed parents for their reactions to the initial IEP conference. Shock, denial, and anger (initial stage of grief), emotions congruent

with disbelief and rejection of the diagnosis, were reported by 47% of the parents. Bargaining, guilt, depression, and isolation (the intermediate stage of grief), emotions congruent with exploring the ramifications and process, were reported by 11% of the parents. Acceptance and hope (the final stage of grief), emotions congruent with recognition, optimism, and moving forward rather than reflecting backward were reported by 45% of the parents. Some parents reported emotional reactions bridging two stages, thus the sum of more than 100%. Though a single study, these results point to several important considerations. Parents faced with the possibility of their children receiving special education services need time and information to accept and understand this possibility.

White (2014) analyzed issues and outcomes of complaint investigations by parents of children with ASD (Autism Spectrum Disorder) in one mid-western state filed from January 2004 to January 2009. Complaint issues as well as the findings of fact leading to decisions were examined. Most complaints resulted from misunderstanding/disagreement about IEPs and services, parental unfamiliarity with legal and educational procedures, misinformation about staff qualifications, and misunderstanding of information provided by the school. The author recommended frequent and clear communication. The challenges parents/guardians experience with information provided from school are long-standing, reaching back to studies showing low levels of accuracy and understanding for psychoeducational assessment information presented at school conferences (Hoff et al., 1978; Zake & Wendt, 1991).

History of Adaptations and Parent Contacts

Students for whom a disability is suspected are likely to have a history of educational accommodations. The referring teacher and previous teachers may have tried multiple options to improve a student's performance (e.g., changes to instruction, adapted curriculum, enlisted the aid of other professionals, requested additional parental support). These options have various levels of success. Regardless of pre-referral option efficacy, the conveying of such information to the team is an essential aspect of providing future accommodations. The collection of this information also reinforces the concept that students are serviced by an educational system characterized by a collaborative approach rather than one of individual teachers and other school staff idiosyncratically addressing the needs of the students.

When a student struggles, the referring teacher and any previous teacher have a history of contacts with the parents/guardians. This may include conferences, graded papers, report cards, phone calls, presentation of class projects. The occurrence of such contacts provides an important foundation to a reasonable suspicion meeting. Parents/guardians may find it helpful to know that teachers have observed and evaluated their child's performance and that this information has been used to aid with various efforts to help their child. A less helpful process is a system in which parents/guardians are not given any indication their child is struggling in school, then suddenly the parent may be told a special education evaluation is needed. When parents/guardians are contacted about reasonable suspicion without a history of accommodations or there has been a lack of communication about performance challenges, parents/guardians may doubt the validity of the reasonable suspicion question and react with alarm.

A System Focus

All educators want their students to achieve grade-level academic standards. Educators want appropriate and timely implementation of accommodations and targeted instruction beyond what they can provide to help

those not meeting these standards. Conventional educational practices may allow initiation and management of such services by individual teachers with limited collaboration with the educational system in which they are embedded, a process that by default may allow some students to not receive timely and appropriate instruction. MTSS provides a structure to meet this demand via the use of psychometrically sophisticated screening and progress monitoring tools and through decision-making rules and associated decision-making teams (Jimerson et al., 2016). However, if schools are not implementing MTSS, they may miss some key elements to inform instruction and special education referrals (or determine reasonable suspicion).

A foundational element of MTSS is implementation of a core curriculum with at least 80% of students meeting the proficiency standard (Brown-Chidsey et al., 2009; Jimerson et al., 2016). Achievement of this standard is obtained with the use of a research-based reading curriculum taught with high levels of treatment fidelity. An accompanying MTSS-related tool is the collection of basic skill benchmark data. Along with other information about class and grade-level performance, benchmark data is analyzed by a grade-level team. Instructional and curricular changes are made as needed to meet the 80% goal. Though not as psychometrically sound as benchmark data, teacher judgement can provide some information about student level of performance.

Two previously noted variables (i.e., history of accommodations and history of teacher-parent contacts) may be handled by individual teachers in the more traditional system of special education evaluation. Consequently, accommodations made by one teacher for a given student may not be communicated to other current or subsequent teachers. Also, there may be times when a given teacher sees indications that a student may not achieve grade level expectations but does not communicate this to colleagues and parents/guardians. Schools need to develop a culture of regularly sharing concerns and accommodations across classrooms and grade levels.

Recommendations

Consideration of reasonable suspicion is the first step in the special education evaluation process, one that receives little attention in education law and regulation as well as the scholarly literature. Though not directly stated, these same sources point to the need for reasonable suspicion considerations to be a team process and to follow practices similar to those used for other assessment purposes. Knowledge of current and past academic accommodations should be shared among teachers and shared with parents/guardians. Improving parent comprehension of special education procedures and helping parents/guardians deal with emotions potentially elicited by consideration of special education services needs a more focused effort. Scholarly work on traditional special education evaluation processes and on MTSS offer schools guidance for addressing the academic needs of students in a proactive and meaningful manner at this early stage of the special education evaluation process.

We propose the following recommendations. The first set focuses on the school as a system and need not be raised at meetings with parents/guardians. The second set focuses primarily on individual students and should be explicitly raised with parents/guardians. The authors recognize the considerable variation practitioners experience with school capacity (e.g., financial resources, leadership for MTSS, reading acquisition philosophy, etc.). Our goal is to explore available avenues of improvement for reader consideration.

System-Level Recommendations

Schools must attend to providing research-based core instruction (Kovaleski et al., 2023). This holds the promise of meeting the academic needs of most students. If 80% or more of students meet grade level expectations (a marker of classroom academic health), it is appropriate to consider targeted and more intense instruction for those students not achieving grade level expectations. If fewer than 80% of the students meet expectations, the focus should be on instructional integrity and curricular change at the class level.

In order to measure class-wide or grade-level progress, schools should conduct universal screening. Universal screening should be conducted at least three times a year and involve assessing all students to determine skill acquisition and to ensure students are making progress (Brown-Chidsey et al., 2009). Using curriculum-based measurement (CBM) for universal screening is a simple way for schools to screen for students at-risk of academic failure. It is appropriate for broad screening and to help stakeholders identify students in need of additional support due to "its efficiency, sensitivity to learning, and direct relationships to learning outcomes" (Hosp et al., 2016, p. 26). Universal screening (more specifically, CBM) can be used to identify not only students scoring below proficiency on a given skill, but it can also identify students who are making minimal progress (Hosp et al., 2016). Most CBM can be given in a relatively short amount of time (a few minutes) and is aligned to curriculum being taught (e.g., reading fluency skills are measured by having students actually read) (Hosp et al., 2016). There are multiple published CBMs that can be used for universal screening. Acadience Learning and AIMSweb Plus are two examples of published reading and math CBM probes that can be used for universal screening. Additional academic screening instruments can be found at the following web address: https://charts.intensiveintervention.org/ascreening (National Center on Intensive Intervention, 2021). Schools conducting universal screening with CBM can also use this data for child find purposes. Examining a student's level of performance and rate of progress can help guide teams in determining whether to proceed with additional intervention and/or a comprehensive special education evaluation. In the absence of MTSS benchmark data or universal screening, schools may need to turn to teacher judgement and, when available, group administered norm-referenced achievement tests.

The Elementary and Secondary Education Act (ESEA) was signed into law in 1965. In 2002, the law was amended as the No Child Left Behind (NCLB) Act. In 2015, the law was again amended as the Every Student Succeeds Act (ESSA) (U.S. Department of Education, 2020). A key portion of ESEA, NCLB, and ESSA was the implementation of Title I, Part A funding for schools (West et al., 2022). The eligibility criteria for school-wide funding for Title I is that the school must have a student population in which 40% of the families in the district meet the criteria for poverty defined by the U.S. government (West et al., 2022). This represents a large portion of public schools in the US and thus has important implications for collection of benchmark data. Missal et al. (2019) point out that reading outcomes in statewide assessments has become more important because of the robust predictive features of early reading competence for later school success. Yet, Missal et al. notes it is not feasible for schools to rely only on state-wide tests to determine proficient readers. Universal screening using CBM as part of a multi-tiered system of support should be conducted (Missal et al., 2019). Merino and Beckman (2010) highlight the use of CBM as a predictor of performance on high stakes tests in states has also been well documented. Therefore, in schools receiving Title I funds, the use of CBM and an RTI system are recommended as a measure of accountability and recommended as a means for identifying students at-risk for academic failure. Universal screening using CBM should be tied to Title I services in schools serving low-income students and families.

Another system-level guideline is encouragement of communication within and between grade levels

on knowledge of accommodations that have helped student academic skill development. Teachers often have creative and impactful techniques for improving skill acquisition. These should be shared with current and future instructors. Schools need to develop a culture of regularly sharing concerns and accommodations across classrooms and grade levels. To that end, teachers should meet regularly to discuss previous and current accommodations and interventions that focus on students for whom meeting grade level expectations is a challenge.

Professional Learning Communities (PLC) offer a promising venue for addressing this need. Helman and Rosheim (2016) describe their potential use within MTSS.

In PLCs, teachers, administrators, and educational specialists collaborate to understand a problem propose and enact new ideas, and analyze the effects of their teaching on student learning. Characteristics of PLCs include a shared mission, a collaborative culture, collective inquiry, an action focus, and a commitment to continuous improvement. PLC meetings are regularly scheduled and can be easily aligned to a MTSS framework in that both are based on the tenets of teamwork, evidence-based practice, and a dedication to continuous improvement of student performance. (p. 89)

A full review of PLCs is beyond the scope of this article, but the interested reader is encouraged to explore https://www.allthingsplc.info and http://www.centerforcsri.org/plc/. See Helman and Rosheim (2016) for a more extensive listing of resources.

Most teachers work in a culture in which parents/guardians receive information through parent-teacher conferences, graded work, etc. on a regular basis and the classroom teacher recognizes potential academic deficiencies and relays this information to parents/guardians along with how the teacher is working to address these needs. Schools need to reinforce and institutionalize this approach so that when a teacher sees a student experiencing learning challenges, the first response is instructional accommodations and sharing this information with parents/guardians prior to consideration of a student-centered disability.

Student and Family-Level Recommendations

When a teacher suspects that a student's learning difficulties are such that a special education evaluation may be needed, under conventional practice, the principal convenes a team to include themselves, the classroom teacher, the school psychologist, and the parent and/or guardian and perhaps the teacher from the previous year. Brought to the meeting are results of any school-wide achievement testing and CBM screening data. Schools engaged in MTSS will collect benchmark/screening data as a standard practice. When individual students are the concern and benchmark/screening is not standard practice, collection of individual screening data should include three CBM probes when the suspected area of deficiency is reading. Using the median of three probes is the convention for collection of reading benchmark data within MTSS (Hosp et al., 2016, p. 190). When evaluating reasonable suspicion, the team balances the need for accurate data with the need for timely consideration of student need. Three CBM reading probes can be administered, scored, and recorded by a properly trained educator within ten minutes. Due to slightly longer administration and scoring times, we recommend one CBM probe each when potential deficiencies may be in spelling, mathematics, or writing. See instructions and examples at www.interventioncentral.org (Wright, 2022). Other sources for basic skill probes include AIMSweb (Shinn & Shinn, 2003), DIBELS Next (Good et al., 2011), easyCBM (Anderson et al., 2014), and Illuminate Learning (2021).

As noted earlier, there are many systems level benefits to collecting benchmark data. At the individual level, benefits include easy understanding by parents/guardians, both the child's level of performance and how it compares to the performance of the class. Used with previous benchmark data, some indication of learning trend would be available. Benchmark data can also be used for determining present levels of performance in an IEP.

At the meeting to consider reasonable suspicion, the teacher should also be prepared to note how the student's basic skill levels compare to grade-level expectations. The previously noted sources of basic skill probes also offer grade-level norms, providing a scale against which to compare student performance. The teacher should note past and current accommodations and the student's response to each. And the teacher should note any targeted and/or intense interventions along with the student's response.

Because the parents/guardians are being brought into the special education process and informed of both core instruction and targeted instruction impact, they often asked what the school will do next. Furthermore, they will ask how, as parents/guardians, they can help. At this point, parents/guardians can be offered the opportunity to provide instructional support as an assist to classroom instruction. Conventional recommendations include supervision of homework completion and checking that the student brings all completed work to school. Beyond these standard recommendations to parents/guardians, there are effective and brief instructional techniques that they can utilize at home. A meta-analysis of parent tutoring (Erion, 2006) involving basic skill instruction yielded moderate to strong effects during primary and intermediate grades for basic skills. Quality training, follow-up consultation, and progress monitoring were related to better outcomes. Erion and Hardy (2019) used knowledge of the instructional hierarchy to select reading interventions for parent tutoring. Zhou et al. (2019) used brief experimental analysis to select reading interventions for parent tutors. Both sets of authors provide specific information for training, monitoring, and consulting with parent tutors.

As previously noted, parents/guardians will likely want to know how the school will support their child's academic success. In the event that the team determines an evaluation is warranted, a permission to evaluate (PTE) will be issued as per IDEA (2004). The school psychologist will then engage in a full, comprehensive evaluation assessing all areas of suspected disability. Following the completion of the evaluation, the team would meet to determine eligibility and, if deemed eligible for special education services, develop an IEP. If the team determines that an evaluation is not necessary at the time, following an MTSS framework, the team may decide to increase the duration or intensity of the intervention (e.g., daily 30-minute intervention sessions to daily 45-minute intervention sessions, a small group of five students to one-on-one intervention, etc.) or change intervention strategies (Brown-Chidsey & Steege, 2010).

Recommendations for Future Research

Family-professional partnerships are a necessary part of special education procedures. Gershwin (2020) discusses the importance of trust in special education consultation. Several studies mention the importance of trust for a meaningful partnership (Forsyth et al., 2006; Tschannen-Moran & Hoy, 2000). The lack of trust in the family-professional partnership is often one of the major causes of conflict between families and professionals (Gershwin, 2020; Mueller et al., 2008). Gershwin (2020) points out the gap in the literature that addresses the extent to which professionals are being adequately prepared to build and maintain trusting partnerships with families. The literature on building trusting relationships in special education is sparce. Research is needed to explore professional knowledge and skills needed to practice trust with families considering special education

service; family perceptions and experiences with trusting professionals before and during special education services; and interventions designed to repair trust where it has been broken in the process of considering special services in schools.

During family/school meetings to discuss reasonable suspicion and possibly obtain permission to proceed with a special education evaluation, a common occurrence is parents/guardians s asking what they can do to assist. Conventional responses include checking homework completion, providing appropriate time and space to complete homework, getting enough sleep, etc. More specific recommendations may be provided on techniques for parents/guardians to aid the student in the completion of work (e.g., flash cards for basic facts, parent and student taking turns to read aloud text). A less common but potentially helpful avenue of assistance is parents/guardians providing specific basic skill instruction to the student. Parent tutoring has a long history of implementation and obtaining moderate effect size (Erion, 2006). Treatment integrity and parent interest can be strong (Erion & Hardy, 2019). As noted earlier, we propose school-wide collection of basic skill benchmark data using CBM, and in its absence, the collection of present level data using CBM. In turn, this data can be used to recommend easy to employ standard protocol interventions for parent tutoring. In the area of reading, CBM fluency and accuracy rates can be use to select accuracy versus fluency intereventions (Szadokierski, 2012). Research is needed on scaling up use of parent tutoring to classwide and grade level use.

Finally, if a child is suspected of having a disability, often teachers are the primary source of these referrals. Podell and Soodak (1993) examined teacher effectiveness and bias in special education referrals, specifically the variables of socioeconomic status and etiology of learning difficulties. They found that teachers' decisions to refer students to special education may be biased by variables that are not related to the students' academic difficulties (Podell & Soodak, 1993). Furthermore, decades of research have demonstrated the disproportionality that exists in special education for minority populations (e.g., Morgan et al., 2017; Sullivan & Bal, 2013). Additional research is needed in this area to help further evaluate the validity of teacher referrals and to assist schools in addressing and minimizing biases that may be factors in special education referrals and eligibility decisions.

Conclusion

Determining reasonable suspicion for students experiencing academic difficulties is a critical step at the initial stage of the special education evaluation process, one that receives little attention in law, regulation, and the professional literature. Drawing on summaries of judicial decisions related to child find, research on parent/guardian involvement with special education, and research related to MTSS, several recommendations have been made at the individual and systems level to evaluate reasonable suspicion with the goal of improved services for all students and effective and efficient use of school resources. Recommendations included will assist in gathering useful data to not only assist teams with determining reasonable suspicion, but also to inform instructional practices, make intervention recommendations and decisions, connect with parents/guardians, and support students for academic success.

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The Evolution of Educator Induction and its Impact on Comprehensive Programming: A Review of the Literature

JASON ALONZO STRAGAND

Abstract

For the last fifty years, teacher induction has been a common strategy used across many schools to introduce new teachers to the policies and culture of a school district. This strategy was successful until policymakers and educational leaders learned more about what new teachers need to feel supported and successful as they enter and progress through their first years of teaching. As a result, induction for new teachers has evolved and is more sophisticated than fifty years ago. While the sophistication of new teacher induction should be celebrated, the support services offered to new teachers in many school systems need tremendous improvement. This literature review finds school districts can better design induction programs that 1) support new teachers during their first years of teaching, 2) bridge achievement gaps between new teachers and student outcomes, and 3) decrease the trajectory of teacher attrition in the United States. The intended goal of sharing this research is to support educational leaders responsible for leading and designing induction programs for new educators.

Keywords: new teacher induction, educator induction, educator mentors, teacher attrition, induction

History of Induction in the United States

Over the past four decades, induction programming has increased in the United States, with each state having varied requirements and expectations for new teachers (Sclan &

Darling-Hammond, 1992). Florida was the first state to design a state-level induction program in 1978 (Feiman-Nemser et al., 1999), but teacher induction can be dated as early as the late 1950s, with many programs having begun as a result of internships, grants, and federal funding (Elias, 1980). Goldrick (2016) showed 29 states requiring support for new teachers, with nine states requiring support for new teachers over an induction period of more than two years. It is unclear through Goldrick's findings which of the 29 states had mentoring for new teachers as a "support," however, the Learning Policy Institute (2023) found an average of 80 percent of new teachers in the United States reported to have a dedicated/assigned mentor in their first year of teaching.

Induction programming in the United States coincided with what educators knew about teaching and learning throughout the different decades and was impacted by the policies of those eras (Odell & Huling, 2000). Fideler and Haselkorn (1999) described four distinct periods (waves) of induction in the United States: period one established before 1986, period two between 1986 and 1989, period three between 1990 and 1996, and period four between 1997 and 2006.

The wave metaphor is appropriate for describing the historical ebb and flow of induction programs due to sporadic budgetary cuts and legislative indifference. Each wave of induction programs is characterized by the time period in which they exist and by the sociological, political, and economic factors that shape that time period such as reduced class size or educational budget reduction. (Wood & Stanulis, 2009, p. 2)

The political reformation of education during the 1970s and 80s developed teacher induction through the era's influence of educational research, policy mandates, and suggestions for change by educators. As a result, these reformations led to many studies that ignited conversations centered on the development of new teachers entering the educational profession. One such study by the Texas Research and Development Center for Teacher Education concluded that being a teacher was not an all-or-nothing proposition, and teachers continuously developed through preservice training, into induction, and then in service (Hall, 1979). Hall's study (1979) catapulted conversations into the 1980s and called to action the need for more research on new teacher development. By the end of the 1990s, about half of all new teachers were participating in some form of induction, and by 2000, this figure increased to 80% (Smith & Ingersoll, 2004). Teacher induction plans are now required in School Improvement Plans under the Every Child Succeeds Act (Every Student Succeeds Act, 2016).

Evolution of Induction in Pennsylvania

The late 1980s brought change to the Commonwealth of Pennsylvania that impacted the permanent certification process of new teachers. Chapter 49, Induction, required all public schools in the Commonwealth to author and lead a formal induction program for new teachers as a precursor to permanent certification (Public School Code, 1949). Throughout the 1990s and 2000s, Chapter 49 Induction was revised six times and provided additional guidelines for induction with each revision.

The Pennsylvania Department of Education (PDE) requires public school districts in the Commonwealth to develop and submit induction plans every six years. Induction plans must be developed and approved by an induction steering committee composed of teachers and administrators. The induction steering committee and the school board of directors must approve these plans before submission to PDE. Pennsylvania's Department of Education (2019) suggested that induction plans be at least one year long and contain content related to Pennsylvania's Standards-Aligned System (SAS) and Pennsylvania's Educator Effectiveness System: Act 82 of 2020. The guidelines also suggested induction programming to include mentoring and support for new educators, including instruction for students from diverse backgrounds, exceptional students, and English-language learners (Pennsylvania Department of Education, 2019).

Pennsylvania's Educator Guidelines suggest new teacher induction as a critical component to the development of Pennsylvania's new teachers, but Allen et al. (2016) believed the guidelines fell short of an evidenced-based induction strategy. Allen et al. (2016) proposed changes for Pennsylvania's Teacher Induction Programming that included revisions to the Legislative Code (22 PA Code 49.16) and the Educator Induction Plan Guidelines (dated 2013). Suggested edits included:

- Increase induction to three years.
- Use language that requires specific induction components.
- Provide training for mentors.
- Provide funding for induction.

More recent state-level efforts have been made that will influence Pennsylvania's new teacher induction processes. Pennsylvania Department of Education (2022a) has set goals aligned to Chapter 49, induction for new teachers, that have initiated the expansion of induction programming within public school entities. The Workforce Strategy is aimed at providing clarity to Chapter 49 Induction guidelines by the year 2025. As part of the new workforce plan, the Pennsylvania Department of Education will redesign its professional learning database to market opportunities more relevant to Pennsylvania teachers and collect data on exemplary induction programs across the state (Pennsylvania Department of Education, 2022a). Darling-Hammond et al. (2020) stated that by 2025, Pennsylvania will need to recruit, hire, and train thousands of new teachers to serve the growing population of students in the state.

Teacher Attrition and Retention

Teacher attrition and retention have been concepts that can be defined by preventing quality teachers who have transitioned away from the profession for reasons that can be avoided (Kelchtermans, 2017). For decades, American schools have been forced to deal with the ongoing reality that teachers have been leaving the field of education. Smith and Ingersoll (2004) found that 15 percent of all new teachers have transitioned away from the profession, and another 14 percent changed schools after their first year on the job. Comparatively, data collected ten years later by Ingersoll and Merrill (2012) showed the statistics have remained unchanged, reporting that 14 percent of first-year teachers transitioned away from teaching by the conclusion of their first year, 33 percent by the end of their third year and 40 to 46 percent within their first five years.

To further compound Ingersoll and Merrill's (2012) research, data from McFarland et al. (2019) showed a decrease in the number of teachers who had completed a four-year teacher education program at the university level. Of those professionals who graduated from a 4-year college or university, new teachers struggled to apply what they learned as a preservice teacher to practical classroom application (Goodwin, 2016). These

studies have indicated that fewer teachers are entering the field of education while just as many, if not more, are leaving. Conclusions from (Goodwin, 2016; McFarland et al., 2019) have shown the teacher attrition gap has yet to close.

Studies of teacher attrition are well documented, and researchers agreed on similar contributing factors that led to teachers leaving the profession. An early study conducted by Ingersoll (2001) found that many new teachers quit the education profession because they were not satisfied with their job based on the following:

- unhappiness with their rate of pay (salary)
- little to no support from their administrators
- lack of student buy-in (motivation)
- issues with classroom management and student discipline
- lack of voice connected to decision-making

Many recent researchers agreed and added to the factors that have led to teacher attrition. Diliberti et al. (2021) surveyed teachers before and after the pandemic and found stress to be the number one reason teachers left the profession. Other researchers have found that work environment (Craig, 2017), lack of upward mobility (Guha et al., 2017), lack of acknowledgment and space to implement innovative practices (Matete, 2021), challenging students (Williams et al., 2020), and low salaries (Allegretto & Mishel, 2018) as additional factors leading to teacher attrition. Teaching attractiveness (salary, work environment, resources) and equity (student access to highly qualified teachers), according to the Learning Policy Institute (2023), also impact teacher supply and demand. Pennsylvania and its bordering states earned an average 3.3 out of five teacher attractiveness rating and a 2.5 out of five teacher equity rating, with a one rating being the least attractive/less equitable and a five being the most attractive/most equitable.

There exists a considerable body of literature that identifies classroom management and unruly students as a pervasive theme that underpins the concept of teacher retention. Public Agenda (2004) identified classroom management as an overwhelming challenge for teachers. They found that 85 percent of teachers surveyed believe new teachers are ill-prepared to manage classroom behavior issues. The Coalition for Psychology in Schools and Education (2006, 2019) indicated that teachers had a preferential need for professional development opportunities focused on classroom management and reported mixed confidence levels. Researchers overwhelmingly agree (Allegretto & Mishel, 2018; Craig, 2017; Diliberti et al., 2021; Guha et al., 2017; Matete, 2021; Williams et al., 2020) many factors cause teacher attrition, and despite decades of research, very little has been done to change the trajectory of teachers transitioning away from the profession.

Policies and Legislation

Since the 1990s, education policy in the United States has changed how we think about teacher reform (Aaronson et al., 2007). Nguyen et al. (2019) have connected education policy to reforming teacher attrition. According to the National Center for Education Statistics (2022), teacher attrition rates are approximately 16 percent.

For the past two decades, several states have attempted to create programs incentivizing teachers to remain in the profession. Extensive research from (Clotfelter et al., 2008; Darling-Hammond et al., 2020; Gruha et al., 2016; Nguyen et al., 2019) has shown incentive programs did reduce teacher attrition, but none reported replicable efforts that sustained gains in teacher retention or policies that changed legislation. An example of

one such program was implemented in North Carolina and paid math, science, and special education teachers a bonus of \$1,800 to teach in high-need schools. According to Clotfelter et al. (2008), the bonus program reduced teacher attrition by 17 percent over three years. In a more recent study of similar monetary incentives, Tennessee offered high-performing teachers a \$5,000 stipend to teach at lower-performing schools. Nguyen et al. (2019) reported a 20 percent improvement in teacher retention. Based on this research, monetary incentives assisted with teacher attrition and led to understanding more about the sustainability of such programs, but the long-term effects on teacher turnover still need to be studied.

More recent and promising approaches to policy reformation are hopeful of reducing teacher attrition and are supported by several researchers. Darling-Hammond et al. (2020) authored a framework that suggested how federal, state, and local policymakers could use the COVID-19 pandemic to excite change for educational reformation. The framework provided research and policy recommendations in 10 focus areas (Priorities). Of the ten priorities, priority nine was explicitly designed to prepare educators to think differently about school through motivation at the federal, state, and local policy levels. A critical piece of priority nine suggested policymakers support "high-retention teacher strategies" (Darling-Hammond et al., 2020, p. xii) through several concepts that included teacher and leader residencies. This research is directly connected to research completed by Guha et al. (2016), who reported:

Studies of teacher residency programs consistently point to the high retention rates of their graduates, even after several years in the profession, generally ranging from 80 - 90 percent in the same district after three years and 70 - 80 percent after five years. (p. 34)

In an executive summary to the Pennsylvania Department of Education, Saunders et al. (2018) recognized tremendous shifts in the state's teacher workforce. Enrollment in teacher preparation programs has declined by 65 percent since 2009, and the percentage of teachers from diverse backgrounds is below the national average by 15 percent (Pennsylvania Department of Education, 2022a). Saunders et al. (2018) recommended changes to Pennsylvania's School Code Chapter 49 to address teacher shortages and better support beginning teacher induction programming. These recommendations have established priorities for Pennsylvania's Every Student Succeed Act state plan by supporting efforts to reduce teacher shortages, provide greater access to high-quality teachers, and increase diversity in Pennsylvania's teacher workforce. Saunders et al. (2018) stated that:

The major review of Chapter 49 presents an opportunity to advance the state's priorities for the future and ensure that Pennsylvania's system of teacher licensure and preparation supports a diverse teacher workforce, promotes equitable access to quality teaching for all students, and helps the districts tackle persistent shortages that undermine teacher quality and student achievement. (p. 33)

Reports, studies, and recommendations like those of Saunders et al. (2020) and Guha et al. (2016) are needed to help policymakers understand more completely the connections between teacher attrition and policy reformation.

Trajectory of New Teachers Entering the Field of Education

Education has remained one of the largest professions in the United States for decades. The profession has employed nearly 3 million public school teachers annually, with 310,000 new educators entering the profession (Aspen Institute, 2022). Over the past 50 years, the education profession has seen shifts from teachers who enter the field and stay until retirement to the younger generation of teachers (end of millennial generation and beginning of generation Z) who enter the field and leave after a few years (Aspen Institute, 2022). The younger generation of teachers of who have entered the profession view teaching as a short-term opportunity, as 40 percent have left the field after five years (Aspen Institute, 2022). The trajectory of new teachers entering and remaining in the field is declining and has posed concerns for the future of education in America. Public school entities nationwide do not have enough teachers to fill open positions and are challenged by not having enough candidates to hire (U.S. Department of Education, 2022a). While traditional teacher preparation programs still represent the majority of new teachers entering the field (National Center for Education Statistics, 2018), closing the growing teacher gap will require creative approaches to training and certifying new teachers.

Research completed by Garcia and Weiss (2019) indicated the United States had seen fewer students entering the teaching profession. Incentivized by the USDOE, Texas became an early leader in this movement and initiated changes in teacher preparation and certification policies that attracted, hired, and retained new teachers who entered the field (Guthery & Bailes, 2019). A study of teacher attrition completed by Guthrey and Bailes (2019) found that Texas's policy reformation on teacher preparation and certification was a statistically significant predictor of new teachers' grit and tenacity.

Like Texas, many states have changed traditional licensure requirements and have relied on alternative education programming to increase the trajectory of new teachers entering the field (Yin & Partelow, 2020). Alternative education programs certifying non-traditional students to become teachers are called Non-Institutions of Higher Education (Non-IHE) programs (Yin & Parelow, 2020). The Center for American Progress found non-IHE alternative certification programs existed in 32 states. Most of these programs are implemented by individual public school entities and regional service agencies (King & Yin, 2022). Yet despite the growing popularity of non-IHE alternative certification programs, traditional teacher programs have enrolled the most significant number of students at 75 percent of the total number of new teachers who have entered the field (U.S. Department of Education, 2022b).

Alternative routes to education have impacted teacher shortages by providing creative pathways to licensures for non-traditional students, but research has shown challenges (Solomon, 2009; Tom, 2000). The alternative education movement was a reaction to the discontent with teacher preparation programs hosted by colleges and universities nationwide. The disenchantment of these traditional teacher preparation programs included accusations of low admission bars being accepted as the norm and coursework that was not practical for novice teachers (Solomon, 2009). Supporters of alternative pathways to licensing new teachers argued that removing unnecessary obstacles that often hindered interested students from becoming teachers would open the gateway for more teachers to enter the profession. Tom (2000) reported that most alternative pathways to education programs are characterized by a summer of intense training and professional development before a person becomes the teacher of record. According to the National Center for Education Statistics (2022), nearly 18 percent of public school teachers earned their licenses through an alternative certification program.

Haberman's (1999, 2001) research showed a positive correlation between alternative pathways to education programs and teacher retention. Haberman reported on the recruitment and retention efforts in a large mid-western school district that collaborated with their bargaining union and a local university to form an alternative pathway program. The alternative education pathway program he studied gave opportunities to minorities who held a non-education bachelor's degree. During this program, individuals participated in

summer training coupled with a teacher residency with a mentor. Haberman (2001) reported that 94 percent of those who participated in the program stayed within the school system over ten years. This study showed increased teacher retention due to an alternative pathway to education programs. It also connects to the research of Darling-Hammond et al. (2020), and Guha et al. (2016) that reported teacher residency programs increase teacher retention.

In contrast to the literature and studies on alternative pathways to education, Scherer (2012, p. 2) stated that because of their popularity, alternative routes to education programs were "all over the map." Darling-Hammond (2000), in her report for the National Commission on Teaching and America's Future, showed the relationship between alternative routes to teaching and retention and found that retention in the profession was connected to advanced levels of preparation. Her study reported that eighty-four percent of teachers who held a Bachelor's and Master's degree in education remained in the field after three years compared to 34 percent who participated in an alternative licensure program and only had a Bachelor's degree (Darling-Hammond, 2020). Darling-Hammond's research (2020) concluded that alternative pathways to education may have reversed its effect on teacher retention and contributed to greater teacher attrition rates.

New approaches to creating a more robust teacher pipeline have been growing in popularity (Bartanen & Kwok, 2022). Grow Your Own Programs (GYO) became increasingly popular, impacted the teacher pipeline, and were often cited as a progressive approach to addressing teacher shortage (Goings et al., 2018). As of 2022, forty-nine states, including the District of Columbia, had at least one GYO program (Garcia, 2022). GYO programs are pathways for high school students interested in becoming teachers (Garcia, 2022). One such program, Pathways2Teaching, gained significant traction over the past decade and has become a national model for high school GYO teacher programs (Bianco & Marin-Paris, 2019). With numerous programs in Colorado, Minnesota, Tennessee, New York, North Carolina, and New Jersey, Pathways2Teach offered high school students the opportunity to earn nine credits (through local universities) during eleventh and twelfth grade. The Pathways program provided weekly classroom field experiences, including working with students with exceptionalities and learners from diverse backgrounds. A unique feature of the Pathways2Teach curriculum was its strong focus on college access and academic writing (Bianco & Marin-Paris, 2019). High school students who completed the program graduated high school with a paraprofessional certificate that allowed them to gain employment within their district upon graduation. Although the Pathways2Teach program has the researched elements of success, specific data on the program was not found.

Educator Perceptions of Induction Programming

Teaching is one of the few professions where new educators are expected to perform as their veteran counterparts on day one, with no real-life training other than student teaching (McGeehan, 2019). States nationwide have new teacher induction programs, but research is scarce in identifying the science or theories of well-designed programs (McGeehan, 2019).

Researchers have determined that new teachers have experienced tremendous shock (Hobson & Ashby, 2012) during their first years of teaching. Clark (2017) reported this could be lessened by understanding new teachers' perceptions as they reflect on their induction experiences.

A review of the literature has shown that numerous large-scale studies of teacher perceptions of their induction experience have been conducted over many years (Holtzapple, 2012; Kutsyuruba, 2020; Nelson, 2016; Wechsler et al., 2010). A recent large-scale study supported by the New Teacher Center analyzed the

perceptions of new teachers and their principals on induction. The study captured the results of educators in four teacher induction programs across the United States. The significant findings of this study, as reported by Kutsyuruba (2020), showed that teachers' perceptions of communication and frequency of classroom visitations were consistently lower than their principals' perceptions. New teachers' perceptions varied as related to support from their principals and ranged from highly supportive (Kutsyuruba, 2020) to unapproachable. Both new teachers and principals agreed there was a shared vision, but many new teachers felt uncomfortable asking questions (Kutsyuruba, 2020). The study also revealed that the "principal's evaluative responsibilities created tensions in the perceptions of their supportive role in teacher induction and mentoring programs" (Kutsyuruba, 2020, p. 31). A reasonable deduction from this study is that perceptions of new teachers and principals will vary, but research has supported significant evidence that strategic mentor-mentee pairing is critical (Andrews et al., 2006). Because the process for mentor matching was not shared in the study supported by the New Teacher Center, it was difficult to determine if that had any significant impact on perception.

Several other researchers have reported on studies and found varying perception levels of new teachers on their induction programming. Nelson (2016) examined new teachers' perceptions of their induction experiences in several North Carolina school districts. He found a tremendous disconnect between new teachers and their assigned mentors and an un-focused professional development experience. Holtzapple (2012) found new teachers struggled to maintain a working relationship with their mentor when their mentor taught in a different building. Wechsler et al. (2010) conducted a study on 39 state-funded induction programs across Illinois and found new teachers did not feel they were offered quality instructional support.

Mentoring as a Critical Piece to Teacher Induction

A mentor is an experienced individual with a specific skill set who shares knowledge with a person who is a novice (Roberts, 2000). The most critical school-based factor that affects student achievement is high-quality instruction given by a teacher (Wong, 2004). Research has been examined from numerous surveys (Charnock & Kiley, 1995; Hudson, 2012) and showed that new teachers remembered their first teaching years as daunting, stressful, and overwhelming. New teachers have rated support from a mentor as the most crucial factor during their induction years (Behrstock-Sherratt et al., 2014).

For the past three decades, mentoring has transformed from "a method of knowledge and skill transfer to understanding mentoring as part of lifelong learning and professional development, key support strategy and mutually beneficial developmental partnership" (Zembytska, 2016, p. 68). Since the 1980s, mentoring has taken hold for two groups of teachers: in-service and pre-service teachers (Feiman-Nemser, 1996). Throughout the 1990s, mentoring became popular and was used as a method of support for new teachers as they grappled with learning how to teach (Darling-Hammond, 1998). The concept of new teacher mentoring has developed since the late 90s from a role as a confidant (Little, 1990) to a connector that brings overarching practices together. This support often consists of supporting new teachers as they navigate the many resources a school may have (Langdon & Ward, 2015; Wang et al., 2008). Other researchers have described mentoring as coaches, teachers, parent figures, role models, counselors, and sponsors (Abell et al., 1995; Ganser, 1998; Gehrke & Kay, 1984; Little, 1990; O'Brien, 1995). More research on defining terms such as coach, friend, supporter, and role model needs to be further developed to show how each concept connects to the dynamics of mentoring (Ambrosetti & Dekkers, 2010).

Educative mentoring programs have shown evidence of mutual gains between the mentor and a mentee (Bradbury, 2010; Feiman-Nemser, 2001). Differences in traditional mentoring models compared to educative mentoring models include assisting new teachers in developing innovative ways of solving both short- and long-term problems they may encounter during their first years of teaching (Feiman-Nemser, 2001). Educative mentoring (Feiman-Nemser, 2001) has been described as mentoring focused on the professional growth of beginning teachers through their experiences with veteran teachers (Bradury, 2010). Educative mentoring has promoted pervasive reflection and continuous development, and case studies showed positive correlations as measured by the engagement of the novice teacher and the mentor (Feiman-Nemser, 2001). Bradbury (2010) has linked the success of educative mentoring to mentoring that has occurred in science classrooms because of its effect on inquiry. In Table 1, the differences between traditional and educative mentoring are described.

Table 1

Traditional Mentoring	Educative Mentoring
Providing support necessary to retain novice teachers in the profession	Providing support necessary to retain novice teachers in the profession
Meeting immediate needs	Meeting immediate needs while developing a long- term orientation toward reform-based science teaching
Sharing practical solutions to day-to-day problems	Thinking about teaching as a complex process where there is rarely one "right" answer
Providing copies of lesson plans, notes, and science activities	Using background knowledge of students and their work samples to plan lessons that support learning about a particular topic
Sharing of advice from mentor to novice	Valuing the contributions and ideas of both the mentor and novice

Differences in Emphasis in Traditional View of Mentoring and Educative Mentoring

Note. Reprinted from "Educative mentoring: Promoting reform-based science teaching through mentoring relationships," by Bianchini, J., Sutherland, S., & Windschitl, M., 2010, *Science Teacher Education*, p. 1052 (https://DO110.1002/sce.20393).

Wexler (2020) found that relationships between novice teachers and their mentors build and continue over time. Recent studies showed that building-level administrators and educational researchers found positive correlations between the overall effectiveness of novice teachers and those who have had mentors as part of their induction program (New York University, 2019). Carter and Francis (2001) compared induction experiences between new teachers with mentors and those without, and found that new teachers with mentors were generally more satisfied with their induction experience.

Thirty-one states have a requirement specific to training before becoming a mentor; in 15 states, this required mentor training is followed by pervasive professional development (Goldrick et al., 2012). Mentor training in the United States that is considered robust and comprehensive trains mentors using:

Different types of individual and collaborative activities: orientation sessions, presentation of available instructional materials and resources for self-education, coaching, training, reflective workshops, teaching seminars, conferences, communication with program coordinators and school administrators, participation in discussion panels or problem-solving groups, mentor support groups and mentor communities. (Zembytska, 2016, p. 71)

Teacher-Mentor Connection

The relationship between a new teacher and their mentor matters and can potentially catapult a new teacher's career into success (Muschallik & Pull, 2016). Research has described the relationship between a new teacher and mentor in many different ways, but there is limited research on how a mentor builds explicit relationships with new teachers by using non-traditional activities (Baker et al., 2018). Relationships that have been built from a place of empathy (Nemanick, 2017), explained school and theoretical frameworks (Maynard et al., 2014), provided new teachers with specific feedback, filled gaps that assist with managing classroom behaviors (Boz & Boz, 2006), and helped teachers find their professional voice (Maynard et al., 2014) have been common themes found in the literature. These new teacher and mentor relationship characteristics have been most helpful when defining the commonalities in highly successful relationships and provided insight into the kind of mentors needed for new teachers. More research determining the types of activities mentors do and should not do is required to better describe the strategy behind forming more efficient relationships between new teachers and their mentors (Maynard et al., 2014). Numerous studies evaluated success between a mentee and their mentor and have measured soft variables like the relationship satisfaction assessed by the mentee and the mentor (Linden et al., 2013). Studies that measured complex variables (Muschallik & Pull, 2016), such as developing teachers as leaders during their induction experience, have been less common in the education field and warrant more research to help identify the specific strategies that support a relationship between mentor and mentee that develop hard skills.

Mentors as collaborators have been a common theme in the literature when defining the relationship between a new teacher and a mentor and is an element needed to enhance a new teacher's skill set (Cochran-Smith & Fries, 2005). In contrast to this common theme, some research has cautioned mentors on collaborating. Mentoring relationships focused mainly on the mentor as a collaborator are more likely to reduce the mentor role from a relationship of guidance to the mentor taking the lead in project completion (Maynard et al., 2014).

Pairing of Teachers and Mentors

Mentoring is essential for new teachers as they participate in induction programming, and often, these relationships extend well beyond the completion of formal induction experiences (Ingersoll & Strong, 2011; Lozinak, 2016; Wong, 2004; Zembytska, 2016). Ingersoll and Strong (2011) suggest criteria for mentor selection to include:

- excellent people skills
- effective as an instructor
- related work experience
- leadership skills
- grade-level or content expertise synonymous with the mentee

Intentional mentor-to-mentee pairing impacts new teachers' success during their first years of teaching (Lozinak, 2016). Zembytska (2016) found that American researchers suggest an ideal age difference of about 8 - 15 years between new teachers and mentors, but many school systems across the country are experiencing high teacher turnover rates and will invite retired teachers to close the mentor-to-mentee gap.

Lozinak (2016) examined mentor-to-mentee assignments and found the matching process of a veteran to a novice teacher to be ineffective as perceived by new teachers. The research study was designed to determine if the mentor-pairing process would improve new teachers' perceptions of mentoring relationships. Lozinak (2016) identified three contributing factors in mentor-mentee pairing that included:

- The relevance of sharing the logistics behind the pairing process with all stakeholders involved;
- The importance of matching mentees with mentors who work in the same building for accessibility;
- The power of matching mentees and mentors in similar grades or content to create a job-alike atmosphere.

Lozinak (2016) shared that despite limitations that included sample size and timing of new teacher hires, the study focused on the importance of thoughtful pairing between mentors. Comparatively, Lozinak (2016) connected research done by Ingersoll and Strong (2011) that provided empirical evidence that suggested 1) mentoring has had positive effects on new teachers, 2) mentoring has helped new teachers refine their craft, and 3) mentoring reduced new teacher attrition. Extensive research shows positive correlations between healthy mentor-to-mentee relationships and teacher attrition (Wong, 2004).

Comprehensive Teacher Induction Programs

A review of the literature found the term innovative to be used minimally to describe induction programs. A more inclusive approach that describes innovative induction programming can be identified as "comprehensive" (Glazerman et al., 2010, p. xxiii).

Glazerman et al. (2010) described comprehensive induction programming as support to new teachers defined by rigor, structure, and meaningful activities. Conversely, teacher induction programs that provide basic support services to new teachers (Berry et al., 2002; Smith & Ingersoll 2004) are referred to as "informal or low-intensity" (Glazerman et al., 2010, p. xxiii).

Many researchers in the field support comprehensive teacher induction programs. Smith and Ingersoll (2004) defined induction programs that incorporated multiple types of support for new teachers as comprehensive. Gilles et al. (2009), Pavao (2018) and Xuan (2019) defined comprehensive induction programming as support for new teachers by reducing workload that allowed mentoring activities and learning experiences. Comparatively, other researchers described support for new teachers similarly. Zembyst (2016) outlined support for new teachers, including dedicated on-site mentors, common planning time with mentors, reduced workload, and opportunities for job-alike networking. As shared by Zembytska (2016), some states have adopted evaluation standards for new teachers connected to induction policies.

Connections to Student Outcomes

Teacher induction has impacted novice teachers' ideology about teaching and learning. However, few long-range research studies have successfully measured or connected the effects of induction on student achievement (Wang et al., 2008). Strong (2006) suggested studies that attempted to measure the connections between new teacher induction programs and student achievement have been difficult to measure. The research completed by Strong (2006) has coincided with research from (Ronfeldt et al., 2013) that has connected new teacher induction programming to student achievement in schools that have had high teacher retention rates (Ronfeldt et al., 2013). Increased levels of teacher turnover and programs that have struggled to successfully prepare students have posed challenges for educational policymakers (Glazerman et al., 2010). Darling-Hammond (2000) noted that high turnover in urban schools has negatively impacted student outcomes because it has forced students to be instructed by teachers lacking the experience to support quality schooling. High turnover has caused undue stress to school systems and has forced negative financial impacts onto school entities that must attract, retain, and professionally develop teachers to replace their poorer counterparts (Ingersoll & Smith, 2003; King & Newman, 2000). It has been found that even teachers with tenacity and grit have shown hardships with curricular content and managing students when they have yet to be adequately supported at the onset of their teaching career (Johnson et al., 2004). This research is connected to the research reported by Glazerman et al. (2010) that has called on school entities to provide a more comprehensive approach to teacher induction programming.

In 2004, the United States Department of Education collaborated with Mathematica Policy Research and led a large-scale review of comprehensive teacher induction support. This research study aimed to determine what, if any, impact comprehensive teacher induction practices had on new teachers and student outcomes. Districts participating in the study chose from two providers, the Educational Testing Service or the New Teacher Center at the University of California, to provide comprehensive induction services. Mentors were trained and received high-quality professional development. New teachers were provided with frequent professional development and ongoing opportunities to observe experienced teachers (Glazerman et al., 2010). The key findings of this research made positive connections between comprehensive teacher induction training and student outcomes. Glazerman et al. (2010) showed that it took three years of ongoing support offered through a comprehensive teacher induction program before a positive impact was made on student achievement. This study proved that support provided by comprehensive induction programs can impact student outcomes. A question for future researchers is, can this study be replicated? If comprehensive support for new teachers (during induction) has proven to impact student outcomes, could this change induction policies?

Additional studies of teacher induction that have connected student achievement (good, bad, or indifferent) as a result of induction are supported by a comprehensive induction strategy and use control trials to measure student growth. As an example of one such study, findings reported by Young et al. (2017) found notable impacts on student achievement in English Language Arts and Mathematics after two years of New Teacher Center (NTC) induction support in schools in Florida, Illinois, and Iowa. NTC's induction program, where student gain was observed, had schools that implemented the program with fidelity, new teachers who interfaced with mentor teachers more often than non-NTC new teachers, focused on instruction, valued at higher levels activities centered on mentoring, and credited their NTC induction experience to the development of stronger skills as novice teachers. Follow-up interviews with new NTC teachers suggested tremendous value in having trained NTC mentors to support them through learning about classroom management, lesson planning, individualizing instruction, continued reflection, and ultimately gaining confidence in their first years of teaching (Young et al., 2017).

Summary

Teacher induction programming continues to evolve, including the critical need to create a more comprehensive support system for new teachers. Comprehensive induction programming is rigorous, structured, and sequenced (Glazerman et al., 2010). It requires thoughtful pairing of mentees/mentors, offers extensive and ongoing training for mentors, and includes multiple types of support for the mentee. Using data, school districts can better design induction programs that 1) support new teachers during their first years of teaching, 2) bridge achievement gaps between new teachers and student outcomes, and 3) impact the trajectory of teacher attrition in the United States.

Recommendations for future research and study that could improve the effect on our youths' educational careers and long-term success in life while helping to retain educators and encourage college students to be attracted to the field include:

- Bonds between an inductee and a mentor: studies that determine the kinds of relational activities between inductees and mentors that lead to strong relationships between the two stakeholders. Specifically, inductee and mentor relationships that positively impact the new educator or educational specialist.
- **2. Employee retention post-induction:** studies that systematically and explicitly identify the kinds of induction experiences that impact the retention of new educators or educational specialists after induction.
- **3.** Attracting and retaining high-quality mentors: studies that analyze why mentors want to participate in educator induction programs to determine strategies to attract potential mentors to participate in the induction process.
- **4. Work-load reduction for new educators and educational specialists:** studies that determine best practices for implementing this strategy and connections between teacher retention and student outcomes.
- **5. Induction programming that develops teachers as leaders:** studies that identify strategies that support the development of novice teachers in becoming school leaders after induction.

The intended goal of sharing this research is to support educational leaders responsible for leading and designing induction programs for new educators. The school district and building-level leader who can reimagine educator induction through a more comprehensive lens will create a trajectory of success and longevity for new educators and educational specialists.

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About the Author

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Addressing Racially Biased School Disciplinary Practices and the Manifestation of the School-to-Prison Pipeline through Restorative Practices

JENNA PLUMP

Introduction

School is supposed to be a place of learning, exploring, innovating, and growing into productive citizens. Most importantly, school should be a safe place for young adolescents to make mistakes and grow from them. Unfortunately, in many cases, school has become a place of fear, heartache, and arrests for our nation's youth, especially those of color. Reasons for this include increased violence in our nation which leads to increased safety measures for our schools. But...safe for whom? Everyone? Or only those with suburban, White, middle-class backgrounds? Students from urban, diverse, low-socioeconomic backgrounds are faced with harsh punishments such as suspensions, expulsions, and even criminal charges from their schools for nonviolent offenses (Skiba et al., 2014). These punishments feed into the school-to-prison pipeline, contributing to the mass incarceration of Black and Brown people.

My personal experiences have contributed to my ability to recognize the severity of harsh disciplinary practices as well as the school-to-prison pipeline. While I was student teaching in 2019-2020, my teacher educator program made sure that we had experience in three different school settings: rural, suburban, and urban. Even though my time was cut short due to the Covid-19 pandemic, I knew after those experiences that I needed to be in urban education because I was passionate about what I saw and realized I could make the biggest difference in this setting. I saw a lot of students who needed someone on their side, students who were fighting battles against a system that is supposed to empower them, students who did not have a place of belonging, and students who had a set trajectory for their life that they did not know how to change. I wanted to fight for and the good fight alongside these young adolescents. By becoming a teacher in an urban district, I could become the advocate for these students who have been served injustices. I could ask the right questions, advocate, be an ally and a person of safety, and help set Black, Indigenous, people of color (BIPOC) up for successful futures.

Currently, I have completed my third year as a middle school teacher in one of the largest urban school districts in Pennsylvania, where the population of 17,659 students is spread across thirteen elementary schools, five middle schools, and one high school (Niche, n.d.). The demographics of the schools are 5.1% White, 7.2% Black, 0.3% Asian or Asian/Pacific Islander, 85.7% Hispanic/Latinx, and the rest are two or more races or have not identified their race or ethnicity (Niche, n.d.). This is also a Title I district where about 30% of the families live below the poverty line and all students qualify for free breakfast and lunch (United States Census Bureau, n.d.). During this time, I have witnessed first-hand racially biased and exclusionary disciplinary practices, which often directs the students toward the school-to-prison pipeline. By using restorative practices concepts, such as circle processes, affective statements, and relationship building, schools can make a difference for the students who need it the most. Before restorative practices are addressed, it is vital to understand the context regarding crime rates, the background of exclusionary discipline policies, and its effect on the school-to-prison pipeline.

Racially Biased School Discipline

The following excerpts are examples of racially biased school discipline that have negatively impacted many BIPOC school-aged children. These examples are to show that our schools have become places of injustice for many.

• "A 14-year-old student of color was arrested and detained for violating a school's dress code" (Theriot & Cueller, 2016, p. 370).

- "A 12-year-old black student in Louisiana was arrested and charged with making terroristic threats and detained for two weeks after telling classmates in the school's lunch line that he would 'get them' if they ate all of the potatoes" (Theriot & Cueller, 2016, p. 370).
- "A 14-year-old black boy is arrested on charges of disorderly conduct and petty larceny for "stealing" a sixty-five-cent carton of milk, even though he was entitled to it as a participant in the school's free lunch program" (Davis, 2019, p. 43).
- "A food fight in a middle school cafeteria in Chicago results in arrests and two-day suspensions for reckless conduct of twenty-five black children, ages eleven to fifteen" (Davis, 2019, p. 43).

According to Hirschfield (2008), over the past two decades, the criminal justice system has increased in size and influence. Mitchell and Leachman (2014), as cited in Milner et al., (2019) reaffirm this statement by noting that changes in state policies, not changes in crime rates, have been a main cause for the expansion of the criminal justice system. An example of a change in policy is the adoption of zero tolerance policies in schools to help combat violence and other problems by treating the incidents all the same no matter how severe the offense is. These changes weakened the foundation of previous school discipline and replaced it with a system that often criminalizes disruptive behavior, as opposed to addressing different offenses with appropriate responses (Pigott et al., 2018). For example, often in the past each situation was considered individually at the educator's discretion. In many schools, this has been replaced with overarching policies that do not take into consideration all of the individual circumstances. Students are getting arrested for minor offenses like tardiness, and statistics indicate that the discipline is racially biased against minorities (Skiba et al., 2014). According to Proceedings of the National Academy of Sciences, racially biased school discipline can be defined as "being in an area with elevated racial bias likely...encountering individuals who have negative feelings and beliefs about one's group and whose actions within and/or outside of an educational setting could contribute to disciplinary disparities" (Riddle & Sinclair, 2019, p. 3). The examples above show that some contributors to racially biased school discipline are school resource officers (SROs), exclusionary discipline policies like the zero-tolerance policy, and harsh punitive discipline for nonviolent offenses.

School Resource Officers

There is an ongoing debate about whether police presence in schools is beneficial for the nation's youth. Resource officers have been in schools since the 1950s with the main purpose of ensuring safety and security for campuses. Around the 1980s, school resource officers (SROs) coincided with the development of the Drug Abuse Resistance Education (DARE) program. In the 1990s, there was another increase of school police presence resulting from the convergence of several factors: the shooting at Columbine High School, a general public perception that youth violence was escalating, the initiation of the Public Safety Partnership and Community Policing Act, and the creation of the Office of Community Oriented Policing Services (McKenna & White, 2018). While there are valid reasons for the number of SROs to be increasing around the country, the rise in use of SROs and other school violence prevention measures is contrary to data showing that violence rates have decreased in school since 1993 and there are solid arguments to be made regarding the growth of SROs in schools (Theriot & Cuellar, 2016). Davis (2019) argues that putting police in schools criminalizes normal childhood and adolescent behaviors, which is demonstrated by the examples listed at the beginning of this section.

While the intentions of introducing more SROs in schools nationwide may be good, they accelerate a shift away from school principals' and teachers' discretion in discipline and toward more formal, legal responses, escalating the school-to-prison pipeline. "During the 2015-16 academic year, more than 291,100 students were referred for or subjected to school-related arrest..." (Counts et al., 2018, p. 405). Hirschfield (2008) connects the growing number of SROs in schools within the larger trend toward more punitive treatment of school discipline. When defining the role of an SRO, the most common duties listed are traditional law enforcement functions like patrolling school buildings/grounds, investigating criminal complaints, handling students who violate laws, trying to minimize disruptions during the school day, educating students and school staff about crime and violence prevention, acting as mentors to students, and partnering with school administrators to help improve the school environment (Theriot & Cuellar, 2016). Discipline is not a duty listed in many descriptions or definitions for an SRO, yet this is seen as one of the most common actions throughout the country by students, teachers, parents, and other community members. Dohrn (2002) states that the use of full-time police officers in schools creates a "prison-like" environment. Meiners (2011) states that on-site police officers give the campus environment the feel of a juvenile detention center rather than a school. At least one study has concluded that students in schools with law enforcement officers are more likely to be arrested than students in schools without officers (Na & Gottfredson, 2011). Through interviews with several dozen SROs, recent research by Sawchuk (2021) has found that race was a key factor in their perception of threatening behavior. Contrary to SROs placed in suburban, majority White districts, those in urban, diverse districts viewed the students to be the greatest threat to safety, with examples being fights, bullying, and aggression. This shows that just by being a person of color in a school adds a target on students' backs. The original purpose of SROs was to be on the side of the students by protecting them from external forces; not to be another thing BIPOC students have to worry about.

Some courts have even made it easier for school students to be arrested due to the reduced arrest and search standards for SROs. These disparities can be caused by the fact that the discretion in deciding whether or not to make an arrest is up to the SRO. Merkwae (2015) states that during a focus group of SROs and school administrators, participants confirmed the considerable discretion given to SROs and school administrators in determining whether a student's conduct violates a law or whether it is simply a violation of a student conduct code. Several recent studies report the subconscious racial stereotypes of decision-makers in the juvenile justice system involving subliminally exposing police officers to "racially-coded" and "racially-ambiguous" descriptions of offenders (Merkwae, 2015). This may hinge on SROs implicit bias about the students' race when they must make a split-second decision whether or not to arrest a student who may have committed a nonviolent crime (Merkwae, 2015). These are just a few examples of how school resource officers contribute to racially biased school discipline.

Zero-Tolerance Policies

Other factors contributing to racially biased disciplinary practices are the use of exclusionary discipline policies and harsh punitive discipline for nonviolent offenses. SROs are certainly part of it, but exclusionary discipline and harsh punitive discipline encompass a broader scope. Arguably, the most common exclusionary practice is the "zero tolerance policy." Zero tolerance policies are administrative rules intended to address specific problems associated with school safety and discipline. In 1994, Congress passed the Gun-Free Schools Act, which required states to legislate zero-tolerance laws or risk losing federal funds (Martin, 2000). Now states, counties, and districts have developed their own policies to meet their local needs. In implementing these policies, "some administrators have cast a broad net, treating both minor and major incidents with equal

severity to 'send a message' to potential violators" (McAndrews, 2001). Zero tolerance policies are considered exclusionary because often the discipline is a suspension or expulsion – which effectively excludes kids from school and their learning environments.

Students of color are the most disproportionately affected by zero tolerance policies, leading them to be suspended at higher rates than their White counterparts (Davis, 2019). A report from the Civil Rights Project at the University of California, Los Angeles, documented large racial disparities in California's school districts, noting that African American students were disproportionately dealt the harshest exclusionary penalties (Augustine et al., 2018).

While the United States Constitution does not define education as one of the fundamental rights owed to all citizens, the Fourteenth Amendment's Equal Protection Clause requires that no public schooling institutions may deny any child residing in the state equal access to education. Even still, through exclusionary tactics, disadvantaged and minority students are systematically removed from classrooms and, therefore, denied their rights to equal educational opportunities (Veldhuizen, 2019, p. 2).

Harsh discipline for minor or subjective infractions has contributed to high suspension rates. Some studies have found that most offenses for which students are suspended are nonviolent (Skiba et al., 2014), including tardiness, absence, and disrespect (Augustine et al., 2018). These are typical mistakes made by many students and can often be explained as developmentally appropriate (Brinegar & Caskey, 2022).

For example, I have witnessed harsh discipline being administered to young adolescents who are just expressing their emotions the way they know how. A 10 year-old student in my class was home with his family while his house was raided by the police looking for his father in the morning before school. His father was sentenced to twenty-five years to life in prison. Prior to this experience, he was a great kid with no behavior problems, loved school, and got good grades. Because he was going through a hard time at home and not sure how to deal with his emotions, he started acting out at school by skipping class, cursing at teachers, not turning in work, throwing things, and getting in fights with other students. In response, the school suspended him several times, despite him being referred to the Student Assistance Program (SAP) and actively participating in group therapy. Knowing the statistics of suspensions, drop-out rates, and the connection to the school-to-prison pipeline, it seems that this student would have been better served by recognizing and responding with consideration of his situation. Instead, the suspensions may contribute to setting him up for failure, just like his father.

The result of criminalization of petty offenses that would not constitute a charge for an adult, such as truancy or running away from home, is manifesting the school-to prison-pipeline. Heitzeg (2008) suggests that zero tolerance policies feed the school-to-prison pipeline and, thus, mass incarceration – as children removed from schools by suspension/expulsion are at-risk to become entangled within the criminal justice system. Think about those 2.8 million people that are suspended each year and consider their futures. Is that how we want to treat our children for experiencing normal adolescent development? While we can acknowledge these policies may not be intentionally directing minority students into juvenile criminal justice systems that result in jail, the fact is they increasingly cause outcomes that exclude students from our schools and our society (Milner, 2019). As Davis (2019, p. 45) points out, "Zero tolerance school policies criminalize children instead of educating them."

School-to-Prison Pipeline

The school-to-prison pipeline is a term used to describe the growing pattern of tracking students out of educational institutions and directly into the juvenile and adult criminal justice system. Milner et al. (2019) states that "schools and prisons are linked in powerfully tangible ways in the United States – in particular through underfunded urban schools and the primarily Black and Brown students they serve" (p. 35). There are seven primary elements that facilitate to the school-to-prison pipeline: lack of geographic opportunity and unequal access to services; inequitable funding policies; experiences of trauma; get-tough and zero tolerance policies; subjective teacher and administration practices; lack of educator preparation in understanding race and class; and criminalization of school facilities (Milner et al., 2019). Strengthening the argument against exclusionary disciplinary policies, this section will demonstrate that the school-to-prison pipeline is a manifestation of the criminalization of school students and facilities.

According to Milner et al. (2019), the United States has the highest incarceration rate in the world, representing 5% of the world's population but 25% of the world's incarceration rates. This is already a problem within itself and indicates that the nation is not using the justice system how it should be intended. In 2016, there were 2.2 million people in the nation's prisons and jails, which is a five hundred percent increase over the past forty years (Davis, 2019). People of color make up about thirty percent of the U.S. population, but they account for roughly 60% of the prison population (Milner et al., 2019, p. 34). Black boys are incarcerated at rates twenty to twenty-four times higher than White boys in some states and Black girls are the fastest-growing segment of the incarcerated population (Davis, 2019). This information is important background in order to understand the imbalance of justice that occurs daily in our nation. Educators need to be aware of the rates at which minorities are getting incarcerated so they can join the fight against injustices. Because of zero tolerance policies and harsh discipline of our school-aged youth, we are feeding into the mass incarceration crisis in our country. This is supported by some statistics that may come as a surprise.

Students are pushed out of classrooms through the administration of harsh consequences which can then lead to the repetition of grade levels, dropping out, committing crimes, and eventual incarceration (Veldhuizen, 2019, p. 3). According to the U.S. Department of Education (2016), of the more than 50.6 million students enrolled in U.S. public schools during the 2015–2016 academic year, 2.7 million students experienced one or more out-of-school suspension (OSS), and at least one in-school suspension (ISS). 120,700 students were expelled, and more than 291,100 students were referred to law enforcement or were arrested (U.S. Department of Education, 2016). To reiterate, Suh & Suh (2007) state that experiencing only one suspension increases an individual's risk of dropping out of school by over seventy-seven percent. Davis (2019) finds a similar trend by noting that "being suspended once in ninth grade]...triples the chance of juvenile justice involvement within one year" (p. 46). Along with harsh disciplinary actions in schools comes increased dropouts, arrests, incarceration rates, and decreased academic achievements.

While suspension may initially seem like a great idea on the surface, removing the source of harm from the learning environment, it actually has a negative effect on everyone who experiences a suspension. The U.S. Department of Education's Office for Civil Rights indicated that 2.8 million students are suspended at least once each year (Milner et al., 2019). Christle et al., (2005), Skiba & Peterson (1999), and Suh & Suh (2007), as cited in Pigott et al. (2018, p. 123) state that "school suspension was found to be a moderate to strong predictor of a student's dropping out of school." A gap in the research is the lack of data on dropout rates for middle schoolers

and how that affects their association with the justice system. If being suspended once in ninth grade triples the chance of involvement (Davis, 2019), then how can being suspended once, or more, in the middle level years affect the chance of dropping out and becoming involved in the justice system?

Prisons use dropout rates to predict future capacity needs for state prisons (Milner et al., 2019). "Arrested Futures (ACLU-CfJJ 2012) notes that youth who do not graduate high school are exponentially more likely to be arrested than youth who get their degree" (Blitzman, 2021, p. 3). Many urban schools in the United States have dropout rates between fifty percent and seventy percent and incarceration rates around thirty-five percent (Milner et al., 2019). Additionally, according to Wald and Losen (2003), as cited in Milner et al. (2019), since the early 1990s, forty-five states have passed laws to make it easier to try juveniles as adults. These connections create educational environments that look like and rely on a criminal justice system that incarcerates our students instead of educating them. Harsh, racially biased disciplinary practices result in a greater chance of dropping out which results in students being more likely to be involved in the criminal justice system.

While there is no data to directly connect my specific school district to the school-to-prison pipeline, there are indicators that the district does feed into the pipeline. I work in one of the five middle schools in an urban district with a racially diverse student population. In this district, the middle schools are grades five through eight, which is ages ten through fourteen. According to administration during a data forum, in the 2021-2022 school year, there were fourteen dropouts in my school. This ranks it number one for the greatest number of dropouts compared to the other middle schools. The other school's drop out numbers are two, four, ten, and thirteen for a grand total of forty-three dropouts in middle school in one year, as found on the district website. That is forty-three children, ages ten through fourteen, that are not guaranteed to get a safe place to go everyday where they can learn, make mistakes, and grow as adolescents. That is forty-three children that have a greater chance of getting involved in illegal activity that could get them involved in the criminal justice system. The district's graduation rate is seventy-one percent, which is sixteen percent lower than the national average (Public School Review, 2023). What happens to the other twenty-nine percent of students? Were these 5,121 students pushed out of the classrooms through harsh disciplinary practices? How many times were these students suspended before dropping out? I know it is unreasonable to hope that the dropout rate is zero, but how can we change this trend? Based on what we know about the school-to-prison pipeline, that is 5,121 students that have an increased chance of being involved in the criminal justice system who were dealt inappropriately harsh discipline and dropped out of school.

Implications

At this point you are asking yourself "what can we do to help change the trajectory of our disciplinary practices?" Restorative practices in schools provide us with hope for positive change. Restorative practices have been introduced to improve school climate and mitigate the problem of high and disproportional school suspensions (Joseph et al., 2021). Restorative initiatives involve formal and informal strategies that all work toward five common goals: (1) build positive relationships; (2) reduce and prevent harmful behavior; (3) resolve conflict and hold people accountable; (4) repair harm and; (5) address and discuss the needs of the school community (Milner et al., 2019). Evidence is increasingly showing that restorative practices can help reduce suspensions, expulsions, and disciplinary referrals (Schiff, 2018). Emerging research further suggests that restorative practices are also having a positive effect on decreasing racial disciplinary disparities in schools (Schiff, 2018). Restorative approaches can provide students of color and their families a forum to point out

systemic inequities, bring root causes of student behavior to the surface, and allow more honest interactions between students and educators (Milner et al., 2019). The use of restorative practices seeks to give students the opportunity to accept responsibility for harms they have caused, endeavor to make things right to the extent possible, and return to the school community as members in good standing (Milner et al., 2019). These inclusive and supportive steps can combat harsh disciplinary practices, the school-to-prison pipeline, and ultimately, improve the lives of our at-risk youths.

With the use of restorative initiatives, school culture can be shifted to improve the overall well-being of the students. Among other things, restorative initiatives in education can empower those who have been affected by harm, provide for healing or repairing relationships, encourage accountability through collaborative decision-making, reintegrate students into their learning community, and create caring climates that prevent further harm and conflict (Gregory & Evans, 2020, p. 9). During a two-year ethnographic study of weekly talking circles with adolescent girls in a public urban high school, findings included that circle participants felt a sense of safety within the school community and the circles promoted refined anger management, active listening, and interpersonal sensitivity (Gonzálaz et al., 2018, p. 209). Other benefits of restorative practices in schools are increased school connectedness, relationship building, academic performance, and social-emotional learning (Gonzálaz et al., 2018, pp. 208-209). Because of the use of restorative practices, students are able to form meaningful relationships which improves the overall climate of the school and creates more well-rounded individuals who are ready to be a positive part of the community.

In order to move in the restorative direction, everyone in the school district should be trained in restorative practices. This includes administrators, educators, paraprofessionals, school resource officers, secretaries, student teachers, etc. With training, these stakeholders will learn about circle processes, affective statements and questions, conferences, the continuum, and how to apply these concepts to their everyday lives and practices. Though the initial two-day training the International Institute for Restorative Practices (IIRP) offers is an initial great step, follow-up is needed in order to keep the momentum.

The restorative initiatives have been proven to work in a couple different settings and trials. IIRP conducted a two-year study in Pittsburgh Public Schools which included observations during IIRP training, surveys of PERC (Pursuing Equitable and Restorative Communities) school staff, observations of restorative practices in case study schools, and interviews with school, district, and IIRP staff in order to implement the IIRP's SafeSanerSchoolsTM Whole-School Change program (Augustine et al., 2018, p. 10). At the conclusion of this study, the PPS district used a Teaching and Learning Conditions (TLC) survey to assess the impact of the overall school climate as rated by teachers. The responses from the teachers indicated higher ratings in conduct management, teacher leadership, school leadership, and overall teaching and learning conditions in the PERC school than in the control schools. This means that PERC teachers considered their schools to have better working and learning conditions (Augustine et al., 2018, p. 70). In other research, staff surveys in Oakland, California showed a generally positive perception of restorative practices in schools with almost seventy percent of respondents reporting the restorative practices helped improve school climate. Another Pittsburgh trial showed that two-thirds of the teachers surveyed in the PERC schools said that the restorative practices initiative had improved their relationships with students (Gregory & Evans, 2020, p. 11). Although not guaranteed, the promise of improved school climate and interactions among students and teachers is strongly indicated.

As once stated by Indira Gandhi, "nothing that is worthwhile is ever easy" (A-Z Quotes, n.d.). Though there are many opportunities for change with restorative practices in schools, there are also challenges. One of the biggest challenges of implementing restorative practices successfully is time and administrative support. Adopting restorative practices into school districts takes a great time commitment from all of those involved. Researchers have studied and found the impact of restorative practices after one, two, three, and seven years of implementation (Augustine, et al., 2018, p. 4). Some researchers even found that a restorative initiative was only effective after the third year but not the second year. Other researchers found that it took a school four years to reach full implementation of restorative practices (Gregory & Evans, 2020, p. 14). The IIRP developed SafeSanerSchoolsTM Whole-School Change program, which is a two-year implementation program for all staff and includes onsite professional development, staff professional learning groups (PLGs), and ongoing restorative practices coaching. During the IIRP study of PERC schools in the PPS, sixty-one percent of surveyed staff said that they viewed time as the greatest barrier, more specifically not having enough time needed to learn more about restorative practices and implementing aspects of restorative practices (Augustine et al., 2018, p. 35). Along with the IIRP training (Introduction to Restorative Practices and Introduction of Circles), staff should receive continuing equity training to develop a more nuanced awareness of structural and institutional racism, learn how they personally reproduce structural inequalities through individual bias, and explore strategies to unlearn it. Adults throughout school districts should be advocates and high implementers of both restorative justice and racial justice (Davis, 2019, p. 55). In a study of middle schoolers in Hong Kong, it was found that only students in schools with full implementation reported significant gains when compared to schools that only partially implemented or did not implement at all. Implementation research emphasizes the need for full commitment to program models, which can take considerable time, and resources (Gregory & Evans, 2020, p. 14).

Restorative practices in schools introduce a different way to build and frame student relationships and provide an alternative for handling student misbehavior that strives toward accountability, repair, and harmony (Joseph et al., 2021). This can come in forms of student conferences, peer mediation, restitution, community service (Veldhuizen, 2019), affective language, mediation through conferences with educators, and community building circle conversations in the classroom (Joseph et al., 2021). Payne and Welch (2015), as cited in Veldhuizen (2019), stated "schools which concentrate on relationship building and view student misbehavior as a violation of a relationship rather than a law record lower recidivism rates than schools which focus on the administration of punishments" (p. 15). Veldhuizen (2019) concludes that with the use of restorative practices, "associations between the administration of harsh punishments in schools on minority populations... will be reduced meaning that less students are being funneled into the [school-to-prison pipeline] (p. 15-16). Gonzálaz et al. (2018) argue that when implemented comprehensively and with fidelity, restorative practices have many benefits including improved climate and safety, increased school connectedness, the development of conflict resolution skills, improved academic performance, and social emotional learning. The question all schools should be asking themselves is not "should we adopt restorative practices?" but rather "how can we implement restorative practices within the current structure of our school?" If there are all these positive benefits to it, why are not more schools doing it? Time and administrative support are preventing this whole-school positive change from happening all across the country.

Preventing and Reacting, Both Restoratively

While restorative practices work to prevent suspensions, expulsions, dropouts, and arrests of students by building meaningful relationships and teaching positive advocacy skills, restorative justice works to heal the harm that is inevitable in a society and reduce recidivism rates. Davis (2019) argues that school-based restorative practices/justice can be considered a promising practice even without randomized control trials. There are not many studies to lead the way of the potential of restorative practices/justice to reduce racial

disparities in school discipline; however, Oakland, California, and Denver, Colorado are setting it in motion. The Oakland Unified School District adopted restorative practices district-wide to address racial disparity in school discipline. With the use of restorative initiatives, the discipline gap narrowed for the Black students by forty-seven percent and for Latinx students, it dropped by fifty-nine percent compared to their White counterparts (Davis, 2019). This makes a strong argument for fostering healthy relationships with students. The suspension rate in Denver Public Schools declined nearly fifty-five percent overall after launching their restorative justice pilot program (Davis, 2019). Although the discipline gap still exists in both districts, and effort still needs to be made to reduce the arresting, suspending, and expelling of Black students compared to White students, there is progress being made in eliminating racial disparities in school discipline (Davis, 2019). This shows that separating the deed from the doer, and focusing more on relationships as opposed to wrongdoings can make school a more equitable and safer place to be for minority students.

It is cautioned, however, that if used incorrectly, restorative practice initiatives can fail to address policies and practices related to oppression, abuses of power, and silencing of voices (Gregory & Evans, 2020, p. 13). To avoid this downfall, Davis (2019) offers three specific strategies to implement restorative practices/ justice in schools in a way that will reduce racial disparities: simultaneously address relationships, institutional racism, and implicit bias; develop district-community collaboration; and develop district-university partnerships (pp. 54-57). If teachers take the initiative to implement restorative initiatives consistently, they could be perceived as more respectful of students of all racial groups, have more positive relationships with all students, and will "less likely rely on punitive school discipline approaches than low-restorative-justice-implementing practitioners" (Davis, 2019, p. 54).

A common strategy of restorative practices is the circle process: both proactive and reactive. The circle process should be used to increase students' critical consciousness: "through circles on racism, different forms of oppression, and the school-to-prison pipeline, practices/justice empowered students to address the harms they had experienced and move on to bigger dreams" (Gregory & Evans, 2020, p. 14). Being an effective leader of restorative justice means working with your own personal bias, conscious or unconscious, or systemic factors in your school that could cause harm to minority students. This is to ensure that the awareness you are bringing is not one-sided. One significant thing to note is that in order to implement restorative practices correctly, you must be able to identify and reflect on your own biases. Davis (2019) states that "Being a warrior and healer in the context of school-based restorative justice practices means practicing with heightened and active awareness of our own bias, implicit or explicit, and of systemic factors in our schools that perpetuate harm" (p. 57). This is not an easy task, but important in order to be an effective teacher for minority groups. It is going to take time. You might hear or realize things you do not want to admit. You might have to relearn things that have been a habit. It is ok to admit you have done or thought things that might be embarrassing. But it is what needs to be done in order to serve the students sitting in front of us and doing right by them. This helps by breaking down barriers in order to form positive, healthy, honest, meaningful relationships. This gives the students a trusted adult to be on their side and to help combat the trajectory of many of their lives.

Another restorative viewpoint comes from Barb Toews. Though her intention was meant for people in prison, her ideas can be applied to students in schools. Toews argues that everyone involved in wrongdoing, whether that be the offender, victim, or friend or family member, have their own justice needs unique to them. Toews continues stating that "Meeting these needs promotes personal healing" and "healed and healthy individuals, in turn, create strong [school] communities" (Toews, 2006, p. 31). Toews (2006) introduces eight individual justice needs and represents them with a visual of a tree (see Appendix). The tree grows from its interconnected roots of relationship and safety, noting that whether the victim or the offender, everyone needs

to be grounded again by a safe relationship based on care, trust, humility, and free of shame. Then the trunk represents empowerment connecting the backbone of the tree to the individual's desire and ability to stand up for justice and do the work. Next comes the branches, symbolizing storytelling and expressing feelings (this could be in the form of affective statements to help make sense of a negative action's impact), information, growth, and accountability. The last part of the tree, the canopy of leaves, is meaning. This meaning is the result of everything from the roots up. With meaning, students can incorporate the harm into their lives, establish a new sense of self-identity, understand their place in the world or the school, and experience renewed control of their lives (Toews, 2006, p. 34). Every tree has roots, a trunk, branches, and leaves, yet every tree is different. Every student is different. Because of the individuality of each student, "Restorative justice finds the right justice response for each person" (Toews, 2006, p. 34). Restorative practices and restorative justice take time. They take work. They take commitment to a good fight. But they also lead to happier, healthier, stronger individuals, schools, and communities.

Recommendations from a Justice

While restorative practices and restorative justice are not the be-all end-all of solutions, Justice Jay Blitzman, of Middlesex County Division of the Massachusetts Juvenile Court, made a list of recommendations in his article "Shutting Down the School-to-Prison Pipeline" to help combat the pipeline and incarceration of juveniles (2021, p. 5). The following are some of his recommendations:

- 1. Remove police from schools. If they are to remain, MOUs [memorandums of understanding] limiting their role to only conduct that threatens or results in serious bodily harm are necessary, as is addressing training in child development and implicit bias.
- 2. Limit school long-term suspension and exclusion and only to conduct that threatens or results in the infliction of serious bodily harm and arrests to conduct that threatens or results in the infliction of serious bodily harm.
- 3. Replace zero-tolerance policies with proportionate and strength-based engagement that promotes positive youth development, such as collaborative problem solving, emotional support, and restorative justice.
- 4. Revive the 2014 Department of Education Guidelines on school discipline.
- 5. Promote policies that limit the collateral consequences of school exclusion during the pendency of court cases by allowing students to remain in school or providin meaningful educational alternatives [restorative practices].

Moving Forward

The correlation between restorative practices/justice and the reduction in racially biased disciplinary practices as well as the school-to-prison pipeline has changed my practice as a teacher in an urban school. I remember these powerful arguments every time I have a bad day and feel like giving up. I use these statistics to remember why I chose this career and to make sure the students in my class do not become just another number. And my hope is that this article, as well as the many others that have been published, will impact school districts and educators' practice in a positive way. It has always been a value of mine to take time out of the beginning of the school year to build strong relationships with my students and to get to know and value them as individuals, rather than as just an academic record. I make sure that I do this every day in order to maintain the relationships and become that person of safety and advocacy.

Further research needs to be done, specifically on the connection of middle school to the school-toprison pipeline. This article indicates that schools need to continue to learn more about school discipline, school-to-prison pipeline, and juvenile incarceration in order to serve students in a positive, productive, and safe environment. One of the main concepts of restorative practices is doing things with each other. With the effort of teachers, administrators, community members, policy makers, police officers, judges, and others we can change the dynamic of school discipline completely which would, in turn, change the trajectory of many lives.

In summary, with restorative practices, such as circle processes, affective statements, and relationship building, schools can help address and actively fight against racially biased disciplinary practices and the manifestation of the school-to-prison pipeline for urban students. The use of restorative practices in schools can change the outcome for many school-aged students as they transition into young adulthood. Restorative practices can help build and maintain healthy relationships that curb suspension rates, which in turn would lead to less juvenile arrests. My hope is to bring awareness to the severity of this national crisis as well as help bring ideas and solutions to educational leaders. Zehr (2015) argues that restorative justice requires us to change not just our lenses but also our questions.

Justice will not be served if we maintain our exclusive focus on the questions that drive our current justice systems: What laws have been broken? Who did it? What do they deserve? True justice requires, instead, that we ask questions such as these: What has been hurt? What do they need? Whose obligations and responsibilities are these? Who has a stake in the situation? What are the causes that have contributed to this? What is the process that can involve the stakeholders in finding a solution? (p. 82)

Go out and be the healer for those students in your life who have been wronged by policies. Ask different questions than everyone else. Ask the right questions. Be on their side when no one else is. Stand up to injustices in your school, district, county, or state. Be a warrior.

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