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Editorial

Special Issue on Precision Teaching for Individuals with Intellectual and Developmental Disabilities.

Precision Teaching has a long-standing history of helping professionals design, implement, and monitor procedures aimed at accelerating behavioural repertoires, a practice grounded in Lindsley's original work and Goldiamond's constructional approach (Evans *et al.*, 2021; Goldiamond, 1974; Lindsley, 1990).

Since its inception, it has led to important discoveries, such as the concept of behavioural fluency (Binder, 1996) and behavioural agility (Lindsley, 2000; Meyer *et al.*, 2021) and has been successfully applied to various areas of social importance, including mainstream, special, and higher education, to name a few (Datchuk *et al.*, 2015; Hughes *et al.*, 2007; Johnson and Street, 2012; Lydon *et al.*, 2019, 2021; McTiernan *et al.*, 2016, 2018; Sawyer *et al.*, 2021; Vostanis *et al.*, 2021, 2022, 2024). Precision Teaching's greatest impact has been in mainstream education particularly the development of academic skills. This success is evident in the outcomes produced in settings such as Morningside Academy (Johnson *et al.*, 2021; Johnson and Street, 2012) or FIT Learning® (Newsome *et al.*, 2024) and in the scholarly literature.

However, Precision Teaching's usefulness and impact do not stop there. Due to its versatile system, Precision Teaching can lead to accelerated outcomes in various skills, such as motor and verbal behaviour skills (Ramey *et al.*, 2016; Thakore *et al.*, 2021; Twarek *et al.*, 2010). As a result, Precision Teaching offers a technology that can be applied more holistically to individuals receiving services, leading to accelerated and optimised outcomes that set the foundation for an improved quality of life (Gambrill, 2013; Schwartz and Kelly, 2021). This fact has implications for students with intellectual (a.k.a, learning disabilities in the UK) and developmental disabilities who require additional support to achieve the outcomes that they and their close social circles value.

This special issue draws attention to Precision Teaching's potential to offer a robust technology that could be part of multi-component systems of support that focus on improving the quality of life of individuals with intellectual and developmental disabilities. To that end, a series of papers are included discussing Precision Teaching and its potential to be a useful tool for that population of individuals. As the readers work through this issue's articles, they will find a series of opinion papers presented by the field's experts that form a rich tapestry of different viewpoints on what Precision Teaching offers. They will also find empirical demonstrations of how Precision Teaching could be readily integrated into existing support systems. Although these papers are not of a scale that could inform policy, such as randomised controlled trials, we hope they will spark ideas in the readers and lead them to consider ways they could integrate Precision Teaching into their practice. Finally, the readers will notice the presence of experts from the USA, the Republic of Ireland, the United Kingdom, and Italy, among others. This fact shows that Precision Teaching has a vibrant community that is growing internationally. This community is actively disseminating Precision Teaching and Standard Celeration Charting through its host organisation, the Standard Celeration Society, something that the president of the society also highlighted in their paper included in this issue (Reagan, 2024). Readers are encouraged to explore the society's website at www.celeration.org and consider attending its annual conference that always pushes the boundaries of Precision Teaching and offers excellent demonstrations of its application.

In this special issue, Reagan (2024) discusses Precision Teaching's current state, innovative applications, and barriers the field needs to overcome to enhance its impact further. Ferris and Fabrizio (2024; this issue) accompany this paper with their commentary, discussing ways to sustain and advance the Precision Teaching field. In their commentary, the authors outline four key areas crucial to the growth of Precision Teaching: (a) purposeful charting to achieve meaningful and sustainable outcomes, (b) balancing established standards with the expanding applications of Precision Teaching, (c) integrating technology

thoughtfully to foster innovation while upholding essential conventions, and (d) actively engaging with the Precision Teaching community to build and share collective knowledge.

Kubina *et al.* (2024; this issue) discuss how Precision Teaching could further support educational psychologists to produce positive outcomes through their work. The authors discuss areas where Precision Teaching could help educational psychologists, such as assessment, intervention, consultation, and research, while highlighting existing barriers to its adoption, such as the response effort required for someone to build their skills in applying the Precision Teaching system. The paper Kubina *et al.* (2024) is accompanied by a commentary (Owen, 2024; this issue) that discusses that Precision Teaching's emerging evidence is broadly positive and suggests that it could be integrated within the continuous professional development of educational psychologists to increase its chances of more widespread adoption.

Griffin and Mannion (2024; this issue) discuss Precision Teaching's presence in educational psychology in the Republic of Ireland, one of the countries with the richest history in applying Precision Teaching. The authors highlight that Precision Teaching is part of the Irish educational psychologists' toolkit and draw attention to the work conducted by the National Educational Psychological Service. The authors discuss how educational psychologists have adopted a consultative service model focused on empowering teachers and explain how Precision Teaching could be integrated within the three primary levels of the Irish Continuum of Support. Diffley and McTiernan (2024; this issue) provide an accompanying commentary where they delve deeper into Precision Teaching's potential for impact in the Republic of Ireland. The authors discuss that for Precision Teaching to have its most significant impact, it must be viewed as a system and not a specific intervention. This way, the system can offer the necessary flexibility to be adapted to different needs and produce accelerated outcomes. They also discuss in detail some crucial findings from a recent systematic review of Precision Teaching's application (McTiernan *et al.*, 2022) and offer guidance on how the system can be used in less rigid ways, in line with its original purpose of being an agile and

flexible system. Their suggestions focus on count times, frequency aim ranges, the types of practice offered, and assent-related implications. Their points are valuable for people who want to learn more about the system.

Van and Kubina (2024; this issue) present a detailed argument for what Precision Teaching could offer to occupational therapists, speech and language therapists, and physiotherapists. They present relevant research findings that evaluated Precision Teaching combined with fluency-building activities to develop gross and oral motor skills. The authors draw attention to an essential procedure typically found in Precision Teaching applications, namely the element-compound analysis, also known as component-composite analysis. This strategy intends to build fluency in foundational skills before more complex ones are introduced, and its primary purpose is to equip the learners to succeed as they progress through their curriculum. Van and Kubina (2024) discuss in detail how this process can inform the development of motor repertoires and underline the implications for professionals working in these areas. They also suggest a consultancy model might be a great way to support these professionals in integrating Precision Teaching into their work. The paper's accompanying commentary by Williams (2024; this issue) elaborates on the positive impact the element-compound analysis can have on developing complex repertoires. Moreover, Williams (2024) highlights various obstacles that need to be overcome for allied health professionals to integrate Precision Teaching into their practice, such as the lack of available provision due to staff shortages or the limited time allied health professionals have to support their clients due to their high caseloads. The author offers a unique perspective from their extensive clinical experience employing Precision Teaching along with some suggestions on how to reduce the response effort for individuals interested in learning how to apply the system.

Following the insights from the opinion papers, Schepp *et al.* (2024; this issue) present a case study showcasing how Precision Teaching combined with the element-compound analysis and fluency-building can lead to improved outcomes in oral motor skills. The authors present an outline of how Precision Teaching was combined with TalkTools to help

the participant, who was diagnosed with Fragile X syndrome, improve their foundational oral motor skills and its impact on their speech production. Although this is a case study, it demonstrates Precision Teaching's potential, which we hope will inspire other practitioners to attempt to replicate the study's findings. The accompanying commentary by Mapp (2024; this issue) delves deeper into the importance of developing fluency especially for individuals with additional and complex needs. Mapp (2024) provides various examples of fluent behaviours while also unpacking the element-compound analysis further and providing an excellent demonstration of the process focused on painting a canvas. This example is particularly useful as it demonstrates how this process can move beyond the academic skills that the Precision Teaching literature has historically focused on. Finally, Mapp (2024) briefly discusses why the element-compound analysis should not be equated with a task analysis, as the two procedures are distinct in their focus and application. This distinction is essential, especially since task analyses tend to be widely used in services for people with intellectual and developmental disabilities (Kobylarz *et al.*, 2020; Seaver and Bourret, 2014).

Vascelli and Iacomini (2024; this issue) also present a case study on how Precision Teaching, element-compound analysis, and fluency-building were used to teach an individual diagnosed with Dravet syndrome daily living skills, specifically putting on a jacket. This paper offers an additional demonstration of how Precision Teaching can be integrated into services for people with intellectual and developmental disabilities. At the same time, it also demonstrates how the by-products of fluency can be assessed in clinical practice. In this study, the authors evaluated endurance, stability, and maintenance, which are some of the primary indicators that fluency in a skill has been achieved (Fabrizio and Moors, 2003). Finally, this special issue ends with a commentary by Solomon (2024; this issue). In it, they discuss how the element-compound analysis can be an act of compassion as it provides individuals with opportunities to practice dysfluent skills in isolation in conditions that make the practice more achievable and, therefore, potentially less aversive. However, the authors also discuss the need for the field to engage in self-reflection and ensure that it keeps up

with developments. For example, Solomon (2024) discusses how fluency-building activities can be quite repetitive, and they could potentially draw similar criticisms to those applied to Discrete Trial Teaching. Moreover, they highlight the need for interdisciplinary work and the barriers professionals face in this endeavour, such as staff shortages and isolated working conditions. Finally, they make some excellent suggestions on including stakeholders in our work, ensuring social validity is in place.

In conclusion, this special issue is not meant to present studies that would aim to affect policymaking. Its primary purpose is to draw attention to Precision Teaching's benefits and how it could help practitioners working in the field of intellectual and developmental disabilities. We believe our aim has been achieved through the opinion papers and case studies included in this issue. Although pockets of Precision Teaching exist outside the USA, the system has not yet become a tool widely adopted in services for people with additional and complex needs, with the positive exception of the Republic of Ireland, which seems to be slightly ahead in this process. What is more, in many cases, Precision Teaching has become synonymous with fluency-building activities. Although behavioural fluency is one of Precision Teaching's most significant discoveries, it has inadvertently overshadowed the originating system, leading people to believe that 'doing Precision Teaching' is synonymous with 'doing timed practice focused on fluency.' We hope that the discussions in these papers will draw attention to the original system as conceptualised by Ogden Lindsley (Calkin, 2023; Lindsley, 1990) and inspire professionals interested in accelerating repertoires and optimising outcomes to explore Precision Teaching further, discovering how it can enhance both their practice and the quality of life of those they support.

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