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Associate teachers' perceptions of reciprocal teaching and learning in physical education lessons

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ABSTRACT

Physical Education (PE) Initial Teacher Education (ITE) programmes are responsible for preparing teachers who can address the needs of an ever-changing and increasingly diverse student population. This paper analyses associate teachers' (ATs) use of the reciprocal approach and the perceived impact on students' learning and social inclusion in PE lessons. Questionnaires and group interviews with 23 ATs were used to explore the impact of the reciprocal approach. Thematic analysis was then used to interrogate the data and identify patterns of response. The findings revealed that ATs valued the reciprocal approach for its impact on students' motor skills and understanding. Moreover, the ATs identified an effect on inclusion and language development, particularly for English as an Additional Language students. These findings have implications for providers of ITE as the distinct features of the reciprocal approach helped ATs to develop their practice and address the needs of their students.

KEYWORDS

Reciprocal teaching; literacy; inclusion; initial teacher education; English as an Additional Language

Introduction

This research project is set withi'n the context of secondary physical education (PE) initial teacher education (ITE), where Associate Teachers (ATs) (also known as trainee or pre-service teachers) are commonly introduced to teaching styles (Mosston & Ashworth, 2002) and teaching models (Metzler & Colquitt, 2021) when they are learning to teach the subject (Chatoupis, 2018). Introducing PE ATs to a broader range of teaching approaches enhances their subject and pedagogical knowledge and potentially moves them away from simply replicating the traditional technique-based and teacher-led approaches that dominate the subject (Escalié et al., 2022; Jones, Tones, & Foulkes, 2023; Jones, Tones, Foulkes & Newland, 2023). Teaching styles (Mosston & Ashworth, 2002) and teaching models (Metzler & Colquitt, 2021) both emphasise an educative focus in PE. The latter has become more prominent, but the spectrum of teaching styles remains relevant as a guiding framework for PE teaching and research - and is still widely included in teacher education programmes (Chatoupis, 2018).

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Muska Mosston introduced the spectrum of teaching styles in his 1966 book *Teaching Physical Education* and further refined it with Sara Ashworth over the next 50 years. The spectrum provides an array of 11 approaches that PE teachers can select to use in their lessons. The styles are arranged in a continuum from command to discovery based on who – the teacher, student or both – is making the decisions. No single style is presented as being better than another; instead, they are considered more or less appropriate, given the aims, context and learners involved in the lesson (Goldberger et al., 2012).

The most used teaching style internationally is the practice style, followed by the command and the inclusion styles (Chatoupis, 2018; SueSee & Barker, 2019). The practice and command styles are commonly used as they seemingly address PE teachers' concern for students developing their motor skills and attaining success in competitive sports. In contrast, the inclusion style is arguably used as it caters to more diverse needs and helps PE teachers address legal mandates in many countries that enforce equal opportunities and inclusion (Chatoupis, 2018; Garrett, 2022). Those learning to teach similarly favour the practice and command styles. Less use is made of the inclusion style as their preference is for more traditional teacher-led approaches (Constantinides & Antoniades, 2022). Overall, the dominance of traditional practice and command styles limits the opportunities to integrate other teaching approaches into PE ITE, often restricting their inclusion to theoretical discussions rather than practical application (Escalié et al., 2022).

The reciprocal style is a less common approach, being found by SueSee and Barker (2019) to be the tenth most used teaching style. Indeed, only around a quarter of PE teachers are thought to use the reciprocal style, with slightly more male than female teachers favouring the approach (SueSee & Barker, 2019). However, despite its apparent underuse, the reciprocal style may have more relevance to student learning. In a reciprocal style, students can refine their motor skill performance through teacher and peer instruction. They can enhance their cognitive understanding by analysing performance and comparing it with the teaching points. They can also have opportunities for social development by working collaboratively around the provision of feedback (Iserbyt & Byra, 2013). These outcomes are consistent with the requirements of the National Curriculum for Physical Education in England, whose aims not only include the development of students' motor skills but also their cognitive understanding and ability to learn from working with others (Department for Education [DfE], 2013a; 2013b).

The reciprocal style seemingly has the potential to combine experiences and develop motor competence alongside other academic abilities in a meaningful manner. It features aspects of teacher-centred approaches, namely a focus on pupils reproducing motor skills and known information. It also reflects the characteristics of a student-centred style that explores more inclusive and social aspects of learning (Tones et al., 2011; Tones & Jones, 2009). That said, the additional complexities involved in the reciprocal teaching style can mean that teachers face problems when including the approach for the first time (Byra, 2004). This may explain why the reciprocal style is underused in schools despite its apparent value. This research aims to analyse PE ATs' experiences of introducing the reciprocal style into their lessons and examine their perceptions of its impact on students' learning and social inclusion. In addition, it aims to analyse how these experiences and perceptions influence their adoption of the reciprocal approach as they start their careers.



Reciprocal teaching and learning

When teachers adopt the reciprocal style, they use verbal and visual cues to teach the students how to perform the skill being learnt before showing them how to observe their partner and provide feedback (Tones & Jones, 2009). To begin with, the teacher models the motor skill and narrates their demonstration to highlight the significant cues that guide the performance. The selection of clearly defined language is considered important here, as the careful use of teaching points can help students understand and replicate the motor skill (Chatzipanteli & Dean, 2020). Once the teacher is confident that the students know the teaching points and can replicate a basic movement pattern, they can move on to the motor skill analysis. The students practice this process by analysing the teacher's performance using the reciprocal card. Reciprocal cards can be helpful scaffolds as they include clear images of the motor skill alongside specific teaching points for the observer to look for (Iserbyt, 2015). The students use the cards to identify and discuss correctly executed aspects of the teacher's performance. Similarly, they also identify any faults the teacher may have deliberately included - to prepare them for the common errors they are likely to observe in each other's performances (Byra, 2004; Iserbyt, 2015). The students are now ready to take turns analysing their partners' motor skills and providing feedback on the teaching points highlighted in the demonstration and reciprocal card (Chatzipanteli & Dean, 2020). Two types of feedback statements can be provided: positive specific feedback and corrective specific feedback. However, responding to one type of feedback at a time provides clarity and helps the students better differentiate between the two (Byra, 2004). Finally, after responding to the feedback statements, the performer and observer switch roles and engage in a different way (Byra, 2004).

The collaborative nature of the reciprocal style encourages cognitive and technical outcomes, as students can practice the technique and provide feedback related to identified teaching points (Byra, 2004; Mowling & Martin, 2016). The approach is thought to enhance motor skill learning as all students have their own peer teacher and can receive specific and immediate feedback that supports or corrects technical performance (Kolovelonis et al., 2011; Mosston & Ashworth, 2002). Indeed, Goldberger and SueSee (2020) revealed that the reciprocal teaching style is as effective as the practice and self-check teaching style for developing motor skill performance – mainly because the collaboration between students allows them to learn at a more efficient rate. In addition, using a reciprocal style develops students' retention of the teaching points and produces more significant cognitive gains than traditional instructional approaches (Goldberger & SueSee, 2020; Iserbyt et al., 2010). The students develop a better understanding of the skill as they observe their partner's performance, compare it to the criteria and provide appropriate feedback (Byra, 2004; Mosston & Ashworth, 2002)

The reciprocal approach can lead to technical and cognitive learning outcomes, and as it uses a peer teaching approach, it can also promote social interaction (Cervantes et al., 2013; Kolovelonis et al., 2011). Students take turns to provide and receive feedback. They interact and solve learning problems together (Mosston & Ashworth, 2002). In doing so, the students develop a level of interdependence as their success depends on their ability to cooperate and learn together (Goldberger et al., 2012). In addition, switching roles and taking their turn to perform and observe increases levels of interaction. It also ensures parity and positive interdependence as both partners have the same opportunities to learn from and with each other (Iserbyt, 2015). The unique collaborative features of the reciprocal approach do create opportunities for social learning. They provide situations that can encourage the development of positive interactions as students learn to communicate and cooperate with others (Chatzipanteli & Dean, 2020).

The reciprocal style is a collaborative approach that seemingly offers the opportunity for technical, cognitive, and social aspects of learning as pairs of students support each other and practice previously taught skills and information (Tones & Jones, 2009). While it may offer the potential for a broader range of outcomes, Byra (2004) noted that teachers often face problems when introducing the approach for the first time as additional complexities are involved. It takes time to prepare resources and even more time to introduce the method to students (Byra, 2004). The subsequent reduction in motor skill practice time within lessons led Kolovelonis et al. (2011) to claim that while students improved their skill performance when using the reciprocal style, the gains were less significant than when other, more straightforward approaches were used. Without adequate training, the observer can provide shorter and less helpful feedback that limits motor skill learning and reduces feelings of self-efficacy (Escalié et al., 2022). That said, while students need to be prepared, once they have experienced the task progression for the first time, it becomes familiar and easier to implement with a different skill (Byra, 2004). Groups trained in analysis and feedback provided more complex advice and showed higher levels of satisfaction, self-efficacy and motor skill performance (Escalié et al., 2022).

The teachers who adopt a reciprocal style are thought to value social outcomes as much as they value cognitive understanding and motor skill learning (Byra, 2004; Tones & Jones, 2009). This research aims to analyse the former. It aims to examine the potential of the reciprocal approach to impact social aspects of learning, as this is a less researched outcome that may have more relevance in contemporary PE (Bailey et al., 2009; Furuta et al., 2022; Lamb & King, 2019). The research considers PE ATs' experiences when introducing the reciprocal style and its perceived impact on learning and social inclusion. It also considers how the ATs' perceptions affected their use of the reciprocal style as they developed greater autonomy and decided for themselves which approach to adopt when teaching the subject.

Methods

This research analysed PE ATs' perceptions of the reciprocal style as they began to use it in their teaching. The ATs' recruitment was based on a purposive sample where all 13 female and 10 male participants were included because of their relevance to the purposes of the study (Clark et al., 2021). All 23 ATs in the cohort were invited to participate in the study, and all 23 agreed to take part. They were asked to participate as they had all been introduced to reciprocal teaching as part of a one-year postgraduate teacher education programme undertaken at the same university ITE partnership in the north-west of England. They were introduced to the approach at university and supported by the tutor in their first use of the style with other ATs and then with students at a partnership school. As such, the sampling strategy provided a valuable means of analysing the PE ATs' use of the reciprocal style, as they could all share their thoughts and experiences

about their first and ongoing use of the reciprocal approach (Clark et al., 2021; Jones, 2022). Furthermore, all participants provided appropriate informed consent, and ethical approval for the study was gained from the University of Chester School of Education Ethics Committee (Reference: 12523RTPE) on the 12th of May, 2023.

The study used questionnaires and group interviews to generate data from the ATs and develop an understanding of their experiences of using the reciprocal teaching style in school. The ATs completed the questionnaires halfway through their one-year postgraduate programme after being introduced to the approach in university sessions and using it independently to teach students at their placement schools. The questionnaire captured the ATs' immediate perceptions by asking open ended questions about their initial experiences of using the approach and assessing its impact on students' learning and social inclusion. It also asked for their broader views and what they thought to be the strengths and limitations of the reciprocal style. Questionnaires are a convenient and commonly used means of generating data in qualitative research (Farrow et al., 2020). That said, while questionnaires are a frequently used and easy-to-administer approach, they also have limitations. For example, the ATs may not have understood the questions or replied in sufficient detail (Jones, 2022). As such, three follow-up focus group interviews were also undertaken with 12 ATs at the end of the one-year postgraduate programme. The group interviews were added until a point of saturation had been achieved, at which point the same data and themes emerged, and no additional insights were provided (Jones, 2022). The subject tutor led the focus group interviews in a quiet office space at the university and used a review of the initial responses to inform the selection of the questions. As such, the ATs revisited the initial questions to share experiences and discuss their different views (Clark et al., 2021; Jones, 2022). In addition, they were also prompted to extend the previous analysis with a more detailed discussion about inclusion and language development and their choice of teaching approaches. The focus group interviews allowed the ATs to revisit the same themes, elaborate on areas of interest, and provide additional insights about their ongoing teaching experiences (Farrow et al., 2020; Jones, 2022).

Focus group interviews may help uncover findings and allow for rich descriptions to emerge, but this creates the problem of comparing nonstandard responses (Jones, 2022). In this study, the initial questionnaire responses were arranged alongside the transcriptions of the audio-recorded focus group interviews. A process of thematic analysis was then used to identify patterns in the data (Braun & Clarke, 2019). Thematic analysis is a flexible and frequently employed approach within qualitative research that is used to analyse data and provide a nuanced account of the participant's responses (Braun & Clarke, 2019). In this study, any pertinent thoughts were captured when reading and re-reading the data generated from the ATs. The data were then coded to identify relevant features that could be clustered into themes. Finally, the themes were revised to test and clarify interpretations (Braun & Clarke, 2019). The content of the refined themes was used in the findings, with each AT in the following analysis being identified by a pseudonym.

Findings

In this study, the ATs discussed their use of the reciprocal approach and its perceived impact on students' learning and social inclusion in PE lessons. Three themes were identified: Learning and limitations, Inclusion, and Social learning and language development.

Learning and limitations

The ATs' first attempts at using the reciprocal approach brought positive results. They noted a favourable impact on their own classroom practice; 'It really helped my teaching and made a huge impact on the lesson. It felt really rewarding' (Ivan). In addition, ATs claimed to either notice an affective response, with one stating that students; 'looked happy and excited to be involved in the lesson' (Helen), or that it impacted learning, 'It really helps them to understand how to perform a skill and what to look out for with their classmates' (Eva). The reciprocal teaching style was associated with various outcomes. It was thought to enhance students' motor skills, develop their understanding, and increase social interactions. While the ATs were initially positive, they also recognised that it was a novel experience for them and their students and that this may have swayed their response; 'They seemed to enjoy the fact it had pictures as well as text, and it was a new thing so it kept them engaged' (Ali). Moreover, they became more critical after using the approach for a while and recognised some limitations. The cards were thought to be 'time-consuming to plan and use in lessons' (Mark). More importantly, they recognised that 'some students do not engage with the cards, and it can feel like it's been a waste of valuable time planning and creating the resources' (Eva). Teachers often face problems when using the reciprocal style for the first time, as additional complexities are involved. The ATs recognised that it could take more time to prepare resources and introduce the method to students and that social interactions may be negative or off-task.

Inclusion

While there were some issues relating to time and student engagement, the overall response of the ATs remained very positive. They noted a range of benefits that were consistent with the findings of other research. In addition, they also noticed the difference it could make for some students who usually struggled in PE, 'For less able pupils, they just don't get it if you do it in the traditional way. When you add in the reciprocal card, it starts to work. If you keep it simple, a few words and diagrams, they begin to get it' (Sue). The reciprocal approach may be one way of addressing a diverse range of needs and including all pupils in PE lessons. Indeed, the ATs often adopted the reciprocal style to facilitate effective inclusion. There was some reference to more able students and those learning more technical skills, but generally, the approach was adopted as an appropriate scaffold for younger and less able learners. One AT noted that they used it 'mainly with year 7s and 8s and nurture groups who require more support and scaffolding to help their understanding' (Mia). Another similarly explained that 'The group had a number of students with education and health care plans, so I hoped the reciprocal cards would help develop their understanding through pictures and linking key points' (Ali).

When ATs were asked to elaborate and explain why they saw reciprocal teaching as an effective inclusive strategy, three main reasons emerged. Firstly, ATs thought less able students could receive more feedback and support; 'everyone gets more attention and feedback than I could ever provide on my own' (Ivan). Moreover, as it engaged all students, the ATs also recognised that it released them to provide individual support where

needed; 'It helps me as a teacher to help the less able students. I could work more independently with pupils who needed extra time and attention to progress' (Eva). Reciprocal teaching appears to be a viable means of providing individual support and attention to less able students without compromising the learning of others.

Secondly, the ATs believed that less able students valued the reciprocal cards themselves. One noted, for example, that they were 'really accessible for lots of pupils with different needs. The pictures with words make it easier for them to understand' (Sue). Another AT recognised that the cards provided some focus; 'For the less able kids, it's a really helpful reminder. Otherwise, they just go off and do their thing. Using the cards brings them back to something more purposeful' (George). The ATs also thought the cards enabled less able students to work more independently and at their own pace. One AT claimed the cards provided a 'reference point they could come back to when unsure' (Ivan), while another noticed that they gave students 'more control over how much they practice and when they move on' (Meg).

The third and final reason ATs viewed reciprocal teaching as an effective inclusive strategy was that the collaborative nature of the approach allowed pupils to be challenged and valued. Most ATs claimed that the students 'enjoyed coaching their peers and helping them progress' (Meg), while others noted that 'some get into the feedback and like discussing, others really don't care' (Musa). That said, when students engaged in the process, ATs recognised the impact on the way they were challenged and valued in the lesson. One AT stated that 'it gave them a different way to be good in PE' (Mark). Participating in physical activities and learning new motor skills can be taxing for students, particularly for those who face difficulties building relationships with peers. However, the collaborative aspect of the reciprocal approach seemingly promoted interaction and enabled social participation; as one AT explained, 'He struggles with the practical, but he's good at providing feedback, and the others wanted to work with him' (Ivan).

Social learning and language development

Reciprocal teaching may help to address individual needs and make children of different abilities feel supported and challenged to persist and feel capable in PE. This outcome was also highlighted in relation to language development and in teaching students with English as an Additional Language (EAL). Initially, the ATs recognised the impact of the approach on the development of all students' subject-specific language; 'It widens pupils' vocabulary. It helps them see words in context and become confident with terminology in PE' (Ali). Some ATs also referred to a more general impact on students' literacy; one noted that 'they link keywords and form sentences from using the reciprocal cards. It has a positive impact on their speaking skills as well as their reading skills' (Eva). Another AT also claimed, 'it's a positive way to engage students in cross-curricular, reading words and being able to apply them' (Nell). Language is crucial in a school subject such as PE, as teachers use it to communicate and achieve their learning aims. In addition, language acquisition is important for pupils as subject-specific terminology identifies the knowledge to be learnt within PE and contributes to better academic outcomes in other subjects. The reciprocal approach seemingly has a role to play as it includes task cards and social interaction, both of which were thought to promote language acquisition.

While ATs recognised the impact of reciprocal teaching on all students' language development, the effect was thought to be more pronounced for those with EAL; 'I found it worked particularly well with EAL students, especially if some of the information was translated' (Ali). Another AT similarly claimed, 'For the EAL kids, it's really helpful. When parts are translated, they absolutely love it' (Ola). The reciprocal card is an integral component of the reciprocal teaching style, and its translation to create a bilingual resource added an extra dimension as students could draw on their first language to make sense of their second. One AT recognised that for EAL students, 'it's a great way to help improve English skills. Using a bilingual version of a reciprocal card helps to highlight keywords in context and improve their vocabulary' (Mia). Another noted that 'the cards allowed them to associate words with actions. They really benefit EAL students who may struggle to understand what the terms mean' (Eva). A well-designed reciprocal card could be an effective scaffold as the simultaneous presentation of pictures alongside corresponding words seemingly helped to promote comprehension. The visual aspect of the design was considered important as a well-presented card could enhance understanding and, within the context of EAL, overcome potential issues with inaccurate translations. One AT explained that 'the pictures are important in case of mistakes. Google translate is easy to use, but you're not always confident it's right' (Meg).

Expecting pupils to use a translated reciprocal card with a partner also provided ATs with a level of flexibility, as EAL students could be challenged without impeding the learning of others. Indeed, it provided a means of promoting interaction; 'We had a lot of Ukrainian kids, so the department were big on it. It was the only way we could help them and get them involved without losing the rest of them. It actually meant that the Ukrainian kids could work and talk with the English kids' (Olli). The reciprocal approach seemingly exemplifies an inclusive learning strategy that promotes interaction and opportunities for EAL students to communicate with others and develop their vocabulary. Moreover, the reciprocal cards brought a clear emotional response from the pupils. One noted, 'When I used it for the first time with the EAL pupil, they just lit up. They wanted it in every lesson' (Helen). While another claimed, 'He was over the moon. There was a real connection' (Lee). In part, this response was thought to be because 'they appreciate that you've gone to the bother of doing something for them' (Owen), but more typically because 'they really appreciate seeing something familiar and having a way into the lesson' (Ola).

The ATs were optimistic about the reciprocal style and intended to continue using the approach as they progressed in their careers. One perceived it to be 'a useful idea that I'd not come across before' (Olli). While another stated that it is 'an approach that I'll look to use again in the future' (Nell). The reasons varied but tended to reflect their experiences during the one-year postgraduate programme. Those who had taught in less diverse classrooms tended to cite the impact on cognitive and skill development outcomes; 'it really adds to my teaching and really helps me to build their understanding and develop their competence' (Owen). In contrast, those who had worked in more diverse settings recognised the social impact of the reciprocal style on inclusion and language development. One noted that it is a 'great way to include and adapt lessons for EAL learners. Translating cards allows them to develop social skills and interact with others in the group' (Helen). Finally, another stated, 'I have found using the



reciprocal approach so beneficial for those that struggle in PE, and it's definitely an approach I will carry on using' (Musa).

Discussion

Technical outcomes

The technical outcomes of the reciprocal approach are well established. When students are paired and take turns to perform and provide feedback on the modelled skill, they have time to refine their technique and develop their understanding of the teaching points (Byra, 2004). In this study, the ATs similarly noticed the same outcomes and recognised that students could receive more feedback to promote their learning during motor skill practice (Cervantes et al., 2013; Jenkinson et al., 2014; Kolovelonis et al., 2011; Mosston & Ashworth, 2002). The ATs also recognised the integral role of the reciprocal cards and that a well-designed card could enhance student learning, particularly for those who lack prior knowledge (Iserbyt & Byra, 2013). That said, the ATs did experience some difficulty when creating and introducing reciprocal cards. It was thought to be a time-consuming process that felt wasted when some students failed to engage with the resource. In most cases, however, the reciprocal cards were well received. The ATs maintained that when students were taught to use them correctly, they understood the process and the technique, and could receive more feedback to promote their motor skill learning (Cervantes et al., 2013).

Social outcomes

The reciprocal approach provided students with a different way to learn in PE. Not only did it help develop their motor skills and cognitive understanding, but it also provided situations where they could adopt different social roles and practice different social skills - such as communication, cooperation, empathy, and trust (Bailey et al., 2009). The reciprocal approach offered an opportunity for social development as students were asked to help others. They were expected to offer and accept feedback and work collaboratively with their partner to solve learning problems together.

The ATs also noted that a reciprocal approach could develop an environment of trust and peer acceptance between students of differing physical abilities as both students contributed to each other's motor skill learning (Cervantes et al., 2013). Reciprocal cards promoted a collaborative ethos that seemingly helped provide participants with a sense of equal status (Garrett, 2022). In addition, the reciprocal cards themselves were seen by the ATs to be a useful scaffold for less able students. They could be read, reread, and studied for as long as needed for the content to be fully understood (Iserbyt & Byra, 2013). Finally, using reciprocal cards meant that all students were engaged in giving and receiving feedback, which freed the AT to provide more time and support for the less able (Byra, 2004; Iserbyt & Byra, 2013). Reciprocal teaching appeared to be a viable means of providing individual attention to less able students without disrupting the educational experience of their peers. Indeed, the ATs recognised that the reciprocal approach offers one means of facilitating effective inclusion in PE. They adopted and intended to continue with the approach as it develops students'

ability to interact positively with others and helps them feel included in lessons (DfE, 2013a; 2013b; 2019).

Social and cognitive aspects of language and communication

The ATs recognised a range of outcomes related to the reciprocal approach but also highlighted its distinct capacity to impact students' language and communication. Effective PE lessons arguably encourage simple and more elaborate forms of communication activities as they rarely occur in silent and static environments (Jones, Tones, & Foulkes, 2023; Jones, Tones, Foulkes & Newland, 2023). Instead, students are encouraged to plan their performances, discuss learning and listen to the reflections of others (McGuire et al., 2001). This allows them to develop their subject-specific terminology and extend their understanding and use of the subject's core concepts (Lundin & Schenker, 2022). Language acquisition can be achieved by using a variety of approaches but is typically enhanced through social interaction, visual aids, and task cards (McGuire et al., 2001). When adopting the reciprocal approach, the ATs implemented these ideas. They designed task cards with a sequence of pictures and teaching points that clearly explained how to perform a motor skill and used them to promote positive interaction with others. The presentation of the reciprocal cards was seen to be important by the ATs as their effective design could enhance student learning (Iserbyt & Byra, 2013). Simultaneously presenting pictures alongside corresponding words helps engage students and promote their understanding (Chatzipanteli & Dean, 2020). Reciprocal cards also allow students to learn at their own pace as they can be revisited and studied for as long as needed to fully understand the content (Iserbyt & Byra, 2013).

The ATs acknowledged that using reciprocal cards meant that wider literacy concepts, namely reading, comprehension, speaking and listening, could all be achieved in PE. Adopting the reciprocal approach allowed them to meet broader learning requirements, as language skills could be developed alongside physical abilities (DfE, 2013a; 2013b; 2019). In addition, the ATs recognised that PE lessons could provide a useful environment for language learning among EAL students (Furuta et al., 2022; McGuire et al., 2001). Despite being relatively unexplored, PE is thought to provide high motivation and low anxiety situations that are optimal for language learning (Salvador-Garcia et al., 2018). The reinforcement and repetition of key terminology in an engaging context with minimal focus on, yet purposeful use of, language provide favourable opportunities for its development (McGuire et al., 2001). That said, the ATs, as with established PE teachers, typically lacked knowledge of language learning and initially struggled to develop relevant skills for students with EAL. Sato and Sutherland (2013) found that several PE teachers had difficulty teaching EAL students. They faced language barriers, cultural differences and unawareness of EAL students' prior learning in PE (Furuta et al., 2022; The Bell Foundation, 2024). The reciprocal approach was, therefore, a useful strategy for ATs to adopt as they progressed in their careers. It could be included relatively easily in their lessons, and its use was shown to be consistent with recognised good practices. Using bilingual reciprocal cards provided a rich context and allowed EAL pupils to draw on their first language to make sense of their second (Conteh, 2023; The Bell Foundation, 2024). As such, it involved EAL students in PE lessons in ways that stretched and challenged their learning (Conteh, 2023). It also promoted interaction

and provided opportunities for EAL students to communicate with others and develop their vocabulary (Furuta et al., 2022; Lamb & King, 2019).

PE may be an underappreciated site for supporting language acquisition. PE taught using inclusive reciprocal strategies may provide a less pressured environment that motivates some EAL students to extend their vocabulary and practice their use of key terms. This is notable, as proficiency in English is the single biggest factor in EAL students' attainment (Conteh, 2023; The Bell Foundation, 2024). As such, the subject may be an appropriate and important setting for language acquisition. It has the potential to enrich EAL students' cultural awareness and understanding (Furuta et al., 2022) and increase their participation and confidence in speaking another language (Salvador-Garcia et al., 2018)

Conclusion

In this study, the ATs were introduced to the reciprocal approach at university and supported by the tutor in its first use with their peers and then with students at a partnership school. The tutor also revisited the reciprocal approach across the one-year postgraduate programme by asking the ATs to reflect on its use within their own school placements. This approach may be useful, as a sustained focus on a more complex teaching style (Byra, 2004) was seemingly needed to develop ATs' competence and confidence in its use. Future research may helpfully examine how providers can support ATs in developing their ability to use the reciprocal approach to secure social learning outcomes.

A focus on developing ATs' ability to use the reciprocal style may be time well spent. In ITE in England, the core content framework (CCF) (DfE, 2019) outlines the minimum entitlement for ATs. It is used with the Teachers' Standards (DfE, 2013a; 2013b) to set out the content that university partnerships must include when designing and delivering their ITE programmes. The CCF and the Teachers' Standards clearly outline the need for ATs to adapt their teaching to meet the needs of students through differentiated and responsive approaches (DfE, 2013a; 2013b; 2019). ATs are expected to support all pupils and provide equal opportunities for success and personal development (Chatzipanteli & Dean, 2020). In this study, the reciprocal approach helped the ATs to meet these expectations. Indeed, many deliberately selected the reciprocal approach to promote positive interaction and inclusion and cater for the learning needs of all students in their PE lessons.

The CCF also explicitly references the requirement for all ATs to learn how to promote students' language development. It includes the expectation that ATs teach and extend vocabulary, use high-quality classroom talk and combine verbal and graphical representations where appropriate (DfE, 2019). The reciprocal approach seemingly offers a valuable means of meeting this requirement in PE lessons, as it allows ATs to address social outcomes relating to language and communication. This finding is particularly significant for EAL students. More than 1.7 million students use EAL in maintained schools in England (The Bell Foundation, 2024), and PE teachers often experience difficulties when trying to teach them (Furuta et al., 2022; Sato & Sutherland, 2013). Revisiting the reciprocal approach in ITE may be one way of overcoming these potential difficulties and helping ATs meet the learning needs of an ever-changing and increasingly diverse student population.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Luke Jones is a senior lecturer and a member of the Mentoring and Coaching in Education (MACIE) research group at the University of Chester. He is a Subject Leader for physical education and a Programme Leader for the PGCert in Coaching and Mentoring. His research interests are mainly focused on mentoring and teacher education within the subject area of physical education.

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