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Practicing the art of noticing in physical education

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Abstract

Education, including physical education (PE), is a realm where practices of inclusion matter daily. These practices aim to contribute to equality in the classroom/gym and the wellbeing and future prosperity of students. However, they can alienate some students and lead to new forms of isolation. This paper explores how exclusion can persist in practices that are meant to include. We apply a composting narrative approach to open up the messy practices in which Dutch PE teachers are entangled. The paper explores how an exploration of inclusive teaching practices can reveal underlying mechanisms of exclusion in PE, and how the art of noticing could help to imagine new practices. The first part of the paper examines current perspectives on inclusion in PE and how teachers navigate and are shaped by discursive practices that inform their practices of inclusion. The second part focuses on dilemmas teachers face in their practices of inclusion. Viewing dilemmas as 'ruins' opens possibilities for imagining new beginnings. Teachers are encouraged to practice the art of reflexive noticing to discover different ways of questioning, navigating and wondering in PE practices. This approach allows teachers and students to collaboratively transform PE lessons into joyful learning spaces for all.

KEYWORDS

Composting storytelling, inclusion, new beginnings, teachers

Key insights

What is the main issue that the paper addresses?

This paper examines how inclusive practices in physical education (PE) often reflect managerial ideas of efficiency, unintentionally reinforcing inequities. It highlights how exclusion is embedded in practices like selection and skill level-based grouping. We explore these boundaries of normalcy and exclusion and discuss their influence and legitimacy.

What are the main insights that the paper provides?

This paper reveals that inclusion practices are often shaped by conflicting discourses that unintentionally result in practices of exclusion. We propose the use of a composting narrative approach and of reflexive noticing, which may enable teachers to embrace inclusion dilemmas as transformative opportunities. Inclusion is reimagined as an open-ended and potentially transformative relational process.

INTRODUCTION

Education, including physical education (PE), is a realm where practices of inclusion matter daily. The intended use of these practices is to contribute to equity and the wellbeing and future prosperity of students, but, at the same time, they may alienate some students and lead to new forms of isolation (e.g. Holland et al., 2023; Koutsouris et al., 2024; Storr et al., 2022). Although PE holds significant value within the education system (Ní Chróinín et al., 2020; Sandford et al., 2024), scholars and policymakers also recognize that the way PE has been designed and delivered in schools does not always ensure that students have adequate opportunities to experience this potential value (Gerdin, 2024; Karamani et al., 2024; Sanders, 2025). Indeed, research continues to show that current PE practices may privilege or marginalize certain students and that these practices are embedded in discourses of preferred and deeply rooted competitive ableism (Brazier et al., 2025; Tanure Alves et al., 2024), healthism (Alfrey & Jeanes, 2023), masculinities (Stride et al., 2022), whiteness (Aasland & Engelsrud, 2021; Thorjussen & Sisjord, 2020; Van Doodewaard & Knoppers, 2018) and heteronormativity (Müller & Böhlke, 2023). Such research continues to underscore the persistent reproduction of inequalities and the complexities in dealing with them. As a result, teachers may struggle to realize positive, inclusive and equitable practices for all. Practices in PE that fail to provide an inclusive and equitable environment for all students can limit their development, wellbeing and future opportunities to enjoy movement and physical activity in their own way. The objective of this paper is to stimulate teachers and policymakers to explore inclusion as a more open-ended and potentially transformative relational process (Gravett et al., 2021). The paper is guided by the research question: How might inclusive teaching practices contribute to underlying mechanisms of exclusion in PE and how can the art of noticing help to imagine new practices? Discussions of the meaning of inclusion/exclusion have at times been based on identities (assigned and self-identified) (e.g. Van Doodewaard, 2022). In this paper, we instead attempt to look at inclusion more dynamically through the lens of the art of noticing and the practices that may flow from this, as explained in the second section.

The first part of the paper focuses on current perspectives on inclusion in PE, how teachers position themselves (and are positioned) within discursive practices that guide their practices of inclusion and how these practices may simultaneously work to exclude. In the second part of the paper, we explore possibilities for new practices in PE by applying the art of noticing, questioning and envisioning. This attempt is inspired by and builds on a critical feminist and multispecies approach as described by Tsing (2015). We explain this approach in the second half of this paper.

Practices of inclusion and exclusion

Inclusion in the context of PE can be defined as the construction of rich learning environments where all students, regardless of gender, (dis)ability, social class, sexuality and ethnicity can experience agency, success and joy through bodily movement (Azzarito, 2020; Nabaskues-Lasheras et al., 2020). This requires teachers to (1) respect and celebrate individual differences, (2) attempt to create fair and equitable distributions of the benefits of PE and (3) view each pupil as an individual instead of (merely) as a member of a particular group or category. This is easier said than done. Teachers use and create meanings to make sense of inclusion and to define what they see as adequate or 'normal' achievement, bodies and behaviours (Van Doodewaard, 2022; Wright, 2004). These definitions of normality or adequacy are often used to define how inclusion is practiced. We use a fictitious vignette drawn from experiences in Dutch PE,[1] in which students in secondary school are jumping into a somersault to illustrate the ways practices of inclusion may work in intended and unintended ways. One of the girls in PE class is Sylvie, a 14-year-old girl who was born and raised in the Netherlands. Her 15-year-old friend, Aisha, was also born in the Netherlands, but her parents were born in Turkey. The teacher, who is in his forties, was born and raised in the Netherlands.[2]

> The teacher has arranged three situations with different levels of tasks: using a trampoline in combination with a high, soft platform to practice a high roll (level 1); using a trampoline with a high vaulting box, and a soft mat on the ground to practice a tip- somersault (level 2); and using a trampoline and a mat on the floor to practice a free somersault (level 3). The teacher asks the students to select a task that fits their skill level. Sylvie knows that the teacher thinks she is a level 2 performer, but today she just wants to do the high roll (level 1). Moreover, her friend Aisha is standing in line for the high roll as well and being in PE with Aisha always feels comfortable and 'at home'. Sylvie loves how Aisha relativizes high achievements and emphasizes that there is more to life than being the best or the bravest. When Sylvie moves toward the line of the high roll, the teacher expresses his disappointment. He says: 'Sylvie, don't underestimate yourself. You showed before that you can perform on level 2. We put so much effort into that last week. You could continue at that level today!'

This vignette shows that, although the teacher probably meant well, he overruled Sylvie's own judgement of adequacy and directed her to another level than the one in which she wished to perform (for plausible reasons as well). This story reflects tensions between the considerations of the student and the teacher's explicit commitment to inclusion and 'improvement' based on a hierarchy of abilities. Importantly, the story also addresses the question of who gets to decide what counts as inclusion or exclusion.

Under the banner of equality and inclusion, various selection practices have emerged in current physical education. For instance, there is a strong belief among teachers and

stakeholders that dividing classes into ability groups defined by levels supports inclusivity in the gym (Karamani et al., 2024; Wilkinson et al., 2021). However, the creation of these policies and their interpretation and enactment by teachers may often reaffirm existing norms and conceptualizations of ability and equity that are informed by exclusionary and competing sets of values and ethics. The creation of ability groups based on discourses of non-disability, sport performance, fitness or competition often leads to exclusionary practices for those who are perceived as failing to meet the 'normal' level. Over the years, researchers (e.g. Van Doodewaard et al., 2018; Van Doodewaard & Knoppers, 2018, 2021; Wilkinson et al., 2021) have shown how these practices that are attempts to include all students can simultaneously add to restricted participation. For example, students who are involved in practicing the high jump are usually allowed to keep jumping when they clear the bar. The moment an individual cannot clear the bar, they are eliminated from the jumping exercise and instead watch while others try to attain higher levels. Similarly, an overreliance on team games or a celebration of a sporty habitus that values White masculinist values of competitiveness and dominance may alienate some children and do little to foster enjoyment in physical movement (Atkins, 2016; Brazier et al., 2025; Haegele et al., 2021; Holland et al., 2023; Jansson et al., 2022; Røset et al., 2024; Storr et al., 2022; Van der Smee et al., 2024; Wilkinson et al., 2021).

Boundaries set by teachers to categorize or place students in or out of adequate grouping forms, including those in PE, tend to be rarely discussed or critically questioned (Van Doodewaard, 2022) or even noticed. The risk of collateral exclusions in such selection and teaching practices increases when it is unclear what is addressed with each inclusion.

Teachers position themselves or are positioned as agents for inclusion, based on (their own) perceptions of normalcy, while at the same time, they are subjected to competing discursive practices about inclusion (Corcoran et al., 2019; Van Doodewaard, 2022). Specifically, current discursive practices that are part of 'regular' PE require PE to be an inclusive place where all students can experience agency, success and joy through bodily movement (Nabaskues-Lasheras et al., 2020). PE, however, is also a place where the organization of activities is often based on labels, specifically labelling students as normal, adequate or inadequate. The standards that need to be met to earn inclusion or to be included in the normal or adequate category tend to be highly ambiguous (Van Doodewaard, 2022).

Specifically, most practices and policies that purport to contribute to teachers' efforts to include tend to reflect managerial ideas about efficiency and adequacy (Bourke, 2019). This occurs, for instance, when teachers select only their best students to perform in front of the class or in an instructional video that will serve as an example for other students (Van Doodewaard et al., 2018), or when students are separated into different levels such as level 1, 2 and 3 (with level 3 being the highest) based on established policies in PE (Wilkinsonet al., 2021). Such practices can affirm inequities because those assessed as less talented, or level 1, may be assumed to be bad examples for their peers (Van Doodewaard et al., 2018) or their opportunities to attend extracurricular clubs and trips may be limited once they are assigned to middle or level 1 activities (Wilkinson et al., 2021). Many current practices of inclusion tend to only make sense against the background of a norm and/or criteria by which something or someone is being excluded (Dobusch, 2021). An exploration of how practices of exclusion and inclusion are embedded in the drawing of implicit boundaries surrounding normalcy and exclusion may open possibilities for discussing the influences and legitimacy of these boundaries.

Elsewhere, Van Doodewaard (2022) has argued that these inclusion practices are saturated with paradoxes. Her study revealed that secondary PE teachers who tried to be inclusive inadvertently reproduced and complied with norms of adequate performance. These norms contributed to these teachers' decisions about ab-normalcy and exclusion while they showed awareness of the paradoxes and complexities in educational practices that are

meant to be inclusive of every student's needs. For instance, teachers contended they accepted all their students. A teacher said: 'They may be a level 1 student, but I love them all' (Van Doodewaard, 2021, p. 551). Another teacher gave an explanation about a girl in PE who tried hard to perform well: 'She just didn't manage to get a satisfactory grade at her level. And she felt really bad about it because she is really eager to perform well. But yeah, she just didn't have what it took (Van Doodewaard, 2021, p. 551)'. These practices reproduce the idea that students who do not meet the standards set by the teachers are individually responsible for their improvement and for the effort needed to meet specific norms that comprise inclusion. This is, however, impossible if a student's performance is assigned the label inadequate or is not considered good enough in fixed group settings, which results in them being excluded from their peers as a group (Haegele et al., 2021; Wilkinson et al., 2021). As a result, this inclusion paradox based on normative adequacy can strengthen practices of differentiation that result in more individuation and exclusion and, subsequently, increase social inequalities in the classroom/gym (see also Karamani et al., 2024). It is not surprising, then, that the large body of research that has focused on the implementation of policies to enhance inclusion reveals exclusionary practices in PE and the failure to lead to significant changes in school climate and educational infrastructure (Aasland & Engelsrud, 2021; Dutch Inspectorate of education, 2023; Ledoux & Waslander, 2020; Lynch et al., 2022). Despite research that reveals the use of practices intended to be inclusive can result in exclusionary teaching practices, these practices seem resistant to change. They remain rooted in robust systems of assessments, normalization and other exclusionary practices, no matter how well-intentioned teachers and policymakers seem to be.

Although the lack of significant change and the marginalization of students labelled as engaging in 'inadequate' performance may suggest that inclusion can be managed by implementing rational solutions, such as improving teacher education, urging teachers to do better and be more inclusive and/or creating opportunities to adapt the curriculum, the issue is more complex (Done & Murphy, 2018; Mowat, 2015). Inclusive PE means paradoxes are inevitable and necessary (Corcoran et al., 2019). Corcoran et al. (2019) argue: '[…] paradox, in life more broadly and in inclusive education specifically, is necessary because its presence communicates the existence of diversity encouraging us to respond in ways that can intentionally upset the status quo' (p. 1004). Therefore, we argue for the need to embrace the dilemmas of inclusion paradoxes and ambiguities as issues that invite the questioning of educational (in)efficiency conditions. Embracing these dilemmas and acknowledging the precarity of students and teachers in their attempts to engage in inclusive PE practices means broadening the scope of seeing, asking and using different approaches (Haraway, 2016; Oosterhoff et al., 2023). This means looking at these practices differently, asking different questions and envisioning different ways to respond. An approach that might be valuable in this regard is 'the art of noticing', as developed by Tsing (2015).

The art of noticing

Maria Lowenhaupt Tsing (2015), an anthropologist, draws on critical feminist studies of capitalism in the introduction of her book *The Mushroom at the End of the World. On the Possibilities of Life in Capitalist Ruins*. Her thesis is that people will only understand the current state of the world when they recognize that the entire globe is in a state of precarity. She states that this precarity has been created by the paradigm of progress that has allowed some instead of many to profit from the capital of (natural) resources, which has led to the exhaustion of people and the planet. Tsing, therefore, searches for other paradigms. She begins her study of precarious living conditions and worlds by following the trail and economy of Matsutakes. Matsutakes are wild gourmet mushrooms that flourish in forests

devastated by people. It is said that the matsutake mushrooms are the first species that grew in the soil after the bombing of Hiroshima. Tsing (2015) reveals how Matsutake mushrooms and their assemblages find their own ways to flourish on and in the ruins of former production sites[3] and their own path to circumvent obstacles (indeterminacy), resulting in patchworks of co-existence and connectedness. She reveals how this journey confronted her time and again with patchiness, which she describes as: '[…] that mosaic of open assemblages of intertwined life forms, each in turn leading to a mosaic of rhythms in time and curves in space' (Tsing, 2015, p. 21). Tsing refers to the concept of assemblage in an ecological sense, meaning that assemblages are open-ended gatherings. 'They allow us to ask about communal effects without assuming them' (p. 23). Her lens on precarious existence and collaborative survival offers a prism through which to study routines of selection and exclusionary practices in PE. There are many insights to draw from the story of the Matsutake (and from those who know how to see differently) and its application to the story of exclusionary practices in PE.

According to Tsing (2015), the societal focus on efficiency, output and simplifications has led to a neglect of the interconnectedness and diversity between individuals and their surroundings. This detachment results in what she calls 'ruins': spaces for and of abandonment, because the search for assets is resumed elsewhere. Ruins are leftovers from production sites. The idea of ruins can be projected onto education as well. When the field of education is seen as a production site, its aim is to reach an optimal balance between input and output. To achieve this, schools should be monitored as if they were factories. According to Oosterhoff et al. (2023), this leads to output-oriented measurements, resulting in student classification by levels, which has become embedded in education policies worldwide. Such places, where output measurements rule and where all the other parts of living seem to be forgotten, can be imagined as ruins. This includes the idea of ruins being projected on practices of inclusion and exclusion, such as the one where students with disabilities feel excluded and out of place in integrated PE settings (Haegele et al., 2021).

However, despite their demise, Tsing (2015) pleads for treasuring parts of these ruins because they often foster new forms of life and culture, even if their former producers have ruined the sites. Perhaps rather than abandoning these ruins, those who wish to change practices that strengthen precarity can explore how to contribute to new thought forms about practices of inclusion. This may sound contradictory, for it may seem wiser for teachers to turn their backs on the ruins of practices that exclude students from enjoyable PE practices. However, if there is no 'other world' to go to, it seems wiser to reconnect with the ruins and inclusion paradoxes in which PE is entangled. This means seeing differently, asking different questions and envisioning different ways to respond.

According to Tsing (2015), fostering curiosity is essential as the first step towards recognizing the intricate connections between all that played a part in creating the structures that contributed to the ruins in the first place. Rainio and Hofmann (2021) call this reflexive curiosity; this involves

> actions that avoid immediate closure, sustaining a puzzle, reflecting on it and connecting it to a need to change, in this way creating "a sense of the possible"… a space in the dialogue in which the envisioning of alternative futures becomes possible, sometimes even doable
>
> (p.741).

Teachers could use reflexive curiosity to look at exclusionary practices and rediscover how to interact with students, the spaces in which they work and so on, in a different, novel way. Just as mushroom roots and spores connect and find different ways to go around obstacles that are part of ruins, teachers can practice the art of reflexive noticing to discover

what it has to offer. Practicing this art may yield novel insights into intricate connections and entanglements produced by spores between and among students, teachers, policymakers and the patchy worlds in which they live.

METHODOLOGICAL NOTATIONS

In the second part of this paper, we use a composting narrative approach to encourage readers to engage in social imaginations and possibilities for new beginnings (Johnston, 2024). The use of storytelling enables individuals to focus on situated detail and the capacity to open up to messy parts or disordered margins, especially when it is part of composting (Hohti & Tammi, 2024). Composting is a 'methodological approach to heterogeneous, open-ended, small stories interwoven with everyday interaction' (Hohti & Tammi, 2024, p. 595) that critically allows studying practices of patchiness and open-ended assemblages as a whole. According to Lange (2024), 'Composting is a built-in revolution of ideas and practices, that can clear space for an emergence of possibilities' (p. 248). Composting storytelling can be mobilized as a critical research approach to advocate for messy entanglement and to collect multiple perspectives (Haraway, 2016). It is about collecting little notes, observations, images and ideas, as well as seeing stories in everything. A composting narrative approach requires carefully tuning into the alterity of others, but it also involves a distancing from one's own limited individual voice to create a push towards speculation and fabulation (Hohti & Tammi, 2024). Story assemblages are always open to surprises and additions. That is why Haraway (2016) accentuates the enmeshment of people in stories and worlds: 'We relate, know, think, world and tell stories through and with other stories, worlds, knowledges, thinkings, yearnings. So do all the other….' (p. 97).

Hence, a composting narrative approach not only shapes the stories that we use in this paper, but they (the stories) also become actors in that they do things (Williams et al., 2022). Most of the imaginative narratives told here are inspired by and based on the empirical and theoretical work of the first author, who is a Dutch PE teacher, PE teacher-educator and qualitative researcher.[4] Other narrative trails are presented here as 'spores'. Their origins stem from a re-reading of the data collected in studies that we conducted during our research on the discursive practices of PE teachers in secondary schools about their articulation of inclusive teaching practices. All the individual interviews ($n = 28$) that were part of these studies were included in the re-reading (Van Doodewaard, 2021; Van Doodewaard & Knoppers, 2018; Van Doodewaard & Knoppers, 2021; Van Doodewaard et al., 2018). We applied a more in-depth focus on the dilemmas teachers expressed concerning inclusion paradoxes that they had experienced. These spores lie at the heart of the three examples, as is explained further on.

To enhance the credibility of the compost and its narratives presented here, we discussed them critically and refined them in group sessions and with critical peers in teaching and academia (Johnston, 2024). As critical post-structuralist researchers, our aim is to have these imaginative narratives contribute to practices where every student can develop a sense of belonging, feel empowered to participate and enjoy PE.

PATCHINESS AND ASSEMBLAGES

We return to Sylvie's class described earlier. Sylvie wanted to practice the somersault in a group together with Aisha. However, the teacher tried to direct her to a group of 'better' performers in which Aisha was not allowed to participate. This means the teacher perceived Sylvie as a gifted individual, able to perform at a higher level, but ignored Sylvie's

entanglement with Aisha and her relaxed way of participating in PE. This practice by the teacher could be seen as a disruptive way of individualization and pressuring Sylvie to please the teacher (see also Guthrie, 2020). Sylvie's multiple entanglements with others offer possibilities for different ways of participating, being motivated and being encouraged to enjoy PE in her own way. The teacher, however, seems to value Sylvie's presence the most when she participates in the 'adequate' category. His behaviour seems to ignore the presence of multiple entanglements in PE that seem to matter a great deal to Sylvie.

Applying the art of reflexive noticing could be helpful here. A noticing and valuing of Sylvie's multiple entanglements could open up ways to disrupt categories created by skill levels, avoid reducing individuals to a category and challenge assigned identities (Tsing, 2015). This practice might give Sylvie and Aisha the chance to develop their own path in PE.

> Imagine a practice in which the teacher recognizes the desire of some students to work together. He encourages Sylvie and Aisha to develop their own variations while practicing the high roll/somersault, such as trying to synchronize their run ups, jumps and/or somersaults, or experiment together and find out what their preferable set up might be out of multiple, variable somersault arrangements (e.g. with or without run ups[5]). The opportunities for Sylvie and Aisha to extend their own ways of working together and developing the joy of movement could then become embedded in practices in which the girls are valued as being more than just their performance level.

Teachers who value these entanglements as being fundamental to the practice of inclusion need to perceive people and things not in isolation from each other, as elements of a category or as individuals belonging to a group, but as assemblages that are interconnected in life.

As we mentioned previously, Tsing (2015) was inspired by the patchiness of entanglements. She uses the concept of assemblages to think of entanglements as open-ended gatherings, as an object of study in the here and now. She contends that assemblages are always polyphonous, relative and fluid. Her notion of assemblages enables practitioners of inclusivity to ask questions about the dynamics of a grouping or community and not to assume the constitution of this dynamic is a given. This process is a continuous in becoming and in between. Connections are made and broken all the time.

> For instance, during judo lessons Sylvie prefers to work with Jochem, who always gently guides her fall.

In this case, different reasonings by Sylvie in different contexts lead to different assemblages. We do not expect teachers to know how each student makes choices and their reasoning. It is important, however, that teachers assume that students have (often) unarticulated reasons for doing/wanting what they do. Whatever the nature of the entanglement, the important point here is that all students are given choices (Azzarito, 2020; Luguetti & Oliver, 2019).

Noticing that assemblages are interconnected by more than just human entanglements brings very different regimes of signs into play. For example, entanglements between bodies and matter (i.e. equipment, technologies, physical test settings, air conditioning, lawns, lights) impact the human embodied affective, sensory experiences and relationships with(in) PE spaces (Hortigüela-Alcalá et al., 2021; Pink, 2011; Thorpe, 2025). Encounters, such as those in the gym, are dynamic events, shaped by chance, coincidence and rhythms in time. This being in-between is by no means average; it is a never-ending of new beginnings.

Noticing such new beginnings requires practicing the art of noticing to discover different ways of questioning, navigating and wondering.

THE ART OF NOTICING: THREE EXAMPLES

According to Rainio and Hofmann (2021), the art of reflexive noticing requires the articulation of persistent dilemmas and seeing them as origins for possible change. The creative tensions that are part of dilemmas are productive because they allow the envisioning of alternative futures that might become possible or even doable (Bouton et al., 2024). Dilemmas or tensions are an inherent part of the teaching profession and contain the potential for change (Caspari-Gnann & Sevian, 2022; Kelchtermans, 2013). These dilemmas are often categorized into diverse sources labelled as conceptual, pedagogical, cultural or political during research processes (Caspari-Gnann & Sevian, 2022). We argue, however, that we do not do justice to the dilemmas extracted from interviews by categorizing them. Instead, we acknowledge them as constructions that contain spores of underlying complexities and potential possibilities (Bouton et al., 2024). We therefore assume dilemmas are dynamic and fluid manifestations. They may provide possible openings in which multiple voices can interact and create new meanings (Bouton et al., 2024; Haraway, 2016). We present the following dilemmas using narratives to illustrate how parts of the ruins can be excavated and transformed by critically following the spores that may offer practical insights into the art of noticing. We use them to question paradoxes of inclusive teaching practices in PE that result in the exclusion of some and to propose possibilities for what the art of noticing could unravel. The next section is based on three spores we followed to illustrate alternative understandings that can flow from the art of noticing. These three examples are not meant to be exhaustive. These spores are based on a critical and reflexive re-reading of the data collected during studies we conducted during our research with teachers and preservice teachers about inclusion in PE (Van Doodewaard, 2021; Van Doodewaard & Knoppers, 2018; Van Doodewaard & Knoppers, 2021; Van Doodewaard et al., 2018). These studies revealed that teachers struggled with the tension between wanting to include and trying to follow conventional lesson plans. The data that were part of these studies can be seen as resembling the ruins of inclusion paradoxes. We used the art of reflexive noticing to explore some of the ruins of these inclusion paradoxes and to concentrate on examples of dilemmas that teachers have experienced (Kelchtermans, 2013; Rainio & Hofmann, 2021) using three possible spores as examples for questioning, navigating and wondering. Applying the art of noticing might shed an alternative light on the polyphon assemblages of which the teachers in these studies were a part.

Questioning /doubting

The first spore reflects dilemmas in which teachers who were interviewed were uncertain about values or truths that they perceive as present in their practice such as discursive practices of race and ethnicity. These tensions are reflected in the following statements by a teacher:

> Perhaps what bothers me the most are students who think they are being discriminated against. And I hope I don't do that [discriminate based on racial differences; ed]. Maybe I'm unintentionally voicing something in my views or something? But I hope not…. that bothers me the most.

Reacting to students who feel they are being racially discriminated can create a dilemma for teachers, especially if they are White. This dilemma is reflected in this teacher's fear of unintentionally reproducing exclusionary racial practices. This dilemma can be seen as an example of positioning oneself (and/or being positioned) in discursive practices of race of which the teacher shows awareness, expresses a desire to resist and feels subjugated to it, all simultaneously. It also reveals an ambiguity of teaching. The awareness and realization of being complicit in such processes of othering require teachers to confront and question inclusion paradoxes if the status quo is to be challenged (Corcoran et al., 2019). Teachers who wish to engage in the art of noticing to study the ruins of practices of racism in their PE lessons must also recognize that ambiguity and complexity are part of this process. According to Tsing (2015), the unpredictability and heterogeneity of precarity of every individual requires the development of a collective curiosity and fantasy to notice what else is present in the ruins of racial discourses. This reflexive noticing, that is, looking for other angles to approach doubts and dilemmas, asking new questions and using different approaches, opens the door for new questions, such as: What if this collective precarity that affects student and teacher subject positions of being judged on individual differences, would guide curiosity about how differences in PE can be celebrated? What does it mean to be othered in this practice and how can carefully tuning into the alterity of others lead to mutual solidarity? These traces of questions could reveal directions to other dimensions of teaching PE, including embodied and empathic relational understanding. These understandings relate to a thoughtfulness or tact that involves the total being of the teacher, an active sensitivity towards the subjectivity of the other (Van Manen, 2015). It is not a skill to use; it is something to be. Such a thoughtfulness and acknowledgement of indispensability of others can be acknowledged when students are working together with those they perceived as strangers, overcome structural barriers and start celebrating differences, as is shown in the following example.

> Imagine a PE project in which students from a primarily White secondary school and teenagers from an ethnically diverse refugee centre nearby (all 10-15 years), co-create a social circus and dance show.[6] In 6 weeks of PE lessons, the group works together to create a playful international circus and dance show, in which they celebrate their various ways of beings and backgrounds. Inspired by their mutual ideas, the youngsters practice new tricks and stunts and work together to rehearse for the show. When the day of the show arrives, they invite audience from the school and the refugee centre to attend the international circus and dance show. Through this activity this group could find a way to celebrate alterity and acknowledge each other's indispensability.

Following the reflective spore of doubting and questioning underlying dilemmas might therefore open up new opportunities for celebrating mutual solidarity while simultaneously acknowledging and celebrating difference.

Navigating

The second spore describes an engagement in which teachers in the various studies explained how they were navigating expectations of themselves and others, about which they were unsure how to act or respond. They point to conversations they try to initiate with students to relate to them in both formal and informal situations during PE classes. Various teachers describe the struggles they experience to achieve mutual understanding in communicating with their students. Teachers, regardless of ethnic background, struggle with the

school rule that requires students to speak Dutch at school, while the national curriculum also requires students to learn to express themselves in PE. The teachers notice that students whose first language is not Dutch perceive these requirements as frustrating (see also Pozzo, 2022).

One of the teachers explained:

> Yes, language is the biggest issue—and I sometimes think it counts double for immigrant children. Also, because they have learned to cover it up. I find it very difficult to break through that shield. And some kids deal with it by putting on an attitude and others manage it by keeping silent. Then you have no other option than to find out throughout the year what a child understands and can do. You do get some information from their primary school, but as a teacher you still must check in your own class who is sensitive to what. So yes, that is challenging….

In this example, the teacher described how students have learned to hide themselves and how tough it is for them and their teachers to break through that shield. Such complexities and ambiguities are everywhere in the educational domains of teaching (Biesta, 2014). These teachers construct it as their responsibility to explore how negative language experiences in primary education may have silenced students in their communication with their PE teacher. How, then, could a teacher come to understand a student's voice?

Practicing the art of noticing would probably require imagining a practice that centres on co-existing and an awareness of many ways of communicating beyond the verbal. Which truths about language, such as requiring students to speak only Dutch in schools, mask the signs or messages the student might be sending at another level? What if communication were valued as being more than words? The content of these lessons could be co-designed with students and colleagues, aligned with the Dutch national curriculum goals that require them to express themselves in PE, in a more holistic sense. This could be done, for example, by letting them design a PE hall full of opportunities for participation aligned with the preferences of their classmates, instead of participating in activities the teachers have chosen (Lamb et al., 2018). Another example of other ways to communicate can be found in the project of Ferf Jentink (www.stillegym.nl), who has introduced a ‘silent PE lesson’ for entire class groups:

> As a PE teacher with hearing impairment, she developed a project on cooperative tagging games that she teaches in schools. In these lessons, all children wear headphones, which means verbal communication is of no use. The children are invited to be creative with other forms of communicating than talking, during the game. In this way the children discover opportunities what it means to be the other, and value other signs than spoken language for cooperation in the game.

Such co-design can lead to a more sustainable co-existence for these children because they offer opportunities for new beginnings and reach mutual understandings.

Wondering

The third spore is based on interviews with preservice teachers. Their positioning as interns in schools reveals struggles concerning the complexity of teaching and the values they hold that conflict with those of their school-based supervising PE teachers and/or

university-based PE teacher-educators. One of the preservice teachers talked about such complexities and reflected:

> Well… I notice that quite a few (classmates) let themselves be silenced [during internships]. And that they let themselves be guided too much-like: 'Yes my school-based supervising PE teacher always did it that way'. And then I think: 'But that is not what teacher education is about: to copy. Anyone can [do that]. Then you just observe someone for 4 years, write down everything they do and you're ready to go'. No, I think…. people always say that you have to be a bit careful about that, but I wonder, nothing is actually done about it. There is no support in how to navigate conflicting values [on inclusion or otherwise, ed.]or how to adjust your own actions accordingly… We hardly ever practice this…

The preservice teacher refers to the complexity of how to exist in spaces where balancing school-based and university-based knowledge about teaching and learning is complex, challenging and often ignored (Daza et al., 2021; Dowling, 2011; Lynch & Curtner-Smith, 2019). This complexity is shaped by power struggles, the juxtaposition of discourses and the tensions related to whose knowledge has more value (Daza et al., 2021). European preservice teachers often do their internships in schools where these dynamics are part of their daily practice (MacPhail et al., 2018). Dowling (2011) contends that problematic situations can occur when preservice teachers are exposed to competing discourses and do not know how these discourses can be challenged or disrupted. The art of reflexive noticing might, however, reveal that school-based supervising PE teachers as well as preservice teachers struggle with competing discourses about inclusion (Hill et al., 2022; Simon & Azzarito, 2019; Van Doodewaard, 2022). These struggles can be framed as ruins of inclusion paradoxes and seen as the start of new beginnings. Slowing down in teaching practice and devoting more time and space for discussion of ideas on inclusion paradoxes might give both preservice teachers and school-based supervising teachers possibilities in expanding their sense of what is possible and in elaborating the envisioning of alternative futures (Rainio & Hofmann, 2021). Opening up educational dilemmas as complex might become a practice in which they embrace not knowing as a source of new beginnings.

A reconceptualization of the patchy assemblages in which preservice teachers, school-based supervising PE teachers and university-based PE teacher-educators are all entangled might offer opportunities to appreciate that life itself is an interconnected, enmeshed web of relations (Tsing, 2015). Exploring the entanglements of PE internships offers preservice teachers opportunities to value each practice on its own and accept complexities that surround practices of inclusion as a start for new beginnings. This would offer preservice teachers opportunities to become PE teachers in their own unique way, without becoming copies of others. This practice in the art of reflexive noticing of practices of inclusion should not be confined to preservice teachers but should be continually practiced by all teachers so it becomes a habit.

DISCUSSION AND CONCLUSION

In this paper, we explored how inclusive teaching practices in PE can contribute to underlying mechanisms of exclusion and how engaging in the art of reflexive noticing could help teachers to imagine new practices. Inclusion in the context of PE is often associated with practices that focus on managing differences between students, especially differences based on performance. This results in teachers engaging in differentiation and selection practices, based on their own perceptions of normalcy, in order to reduce complexity and define what individual

students need in order to be included. At the same time, teachers are subjected to competing discursive practices about inclusive education (Corcoran et al., 2019; Van Doodewaard, 2022). Such ambiguous ideas on inclusive education add to collateral exclusion of some students because it is unclear what is addressed with each constructed inclusion practice. Managerial differentiation practices in PE thus prove to be saturated with inclusion paradoxes.

In the second part of this article, we suggested that inclusion paradoxes can be seen as ruins of managerial educational practices to which the art of noticing can be applied (Tsing, 2015). Ruins can be seen as assemblages that contain new forms of life, that might enable new practices to emerge (Tsing, 2015). Rather than abandoning the assemblages of inclusion paradoxes, we suggest transforming practices that enhance precarity by exploring how to contribute to new thought forms about practices of inclusion. We acknowledged the dilemmas of teachers, that are part of inclusion paradoxes, as dynamic and fluid constructions that contain spores of underlying complexities and potential possibilities (Bouton et al., 2024). Following some of these spores allowed us to search for alternative understandings and possibilities.

We followed the spores of questioning/doubting, navigating and wondering and applied a composting narrative approach to explore how discursive inclusion practices could be opened and altered. By avoiding immediate closure, sustaining a puzzle, reflecting on it and connecting it to a need to change, we aimed to inspire a sense of the possible (Rainio & Hofmann, 2021). Such reflections on various dilemmas revealed opportunities to embrace the ambiguity and unpredictability of relational practices such as teaching and to criticize the dualistic and fixed suggestions of performative and competitive visualizations of educational practices.

The goal of this paper was to open up spaces to explore how inclusion can be developed as a more open, affected, embodied and relational process (Gravett et al., 2021). Teachers could be encouraged to engage in this domain of carefully tuning into the alterity of others and distancing from one's own limited individual voice towards inclusion. This might foster reflexive curiosity and a push towards speculation on alternative routes to embrace inclusion paradoxes as sources for new beginnings. In this way, a composting narrative approach could offer opportunities for teachers to re-invent their own PE lessons, together with students, into joyful learning spaces for all. We end this paper with a composting reflection of the first author.

> By applying the art of noticing to my own work, I became more aware of the spores that had been hidden in the data all along, but I had overlooked. At first my research focused mainly on understanding modalities of truth and discursive practices to understand why teachers do what they do. I practiced the art of noticing by re-reading previously collected data to listen to what could be heard between the lines. But it was also hard work. It took effort to learn to look beyond the obstacles of the ruins and to accept that obstacles can become building blocks at the same time. The expectation that the same exclusion mechanisms would stay present, hindered my view. By discussing the study with critical peers and taking time to try to understand this, I was able to focus on different spores, that were there all along. The art of noticing changed my views and dialogues that were part of my own practices as a teacher-educator and enabled me to understand how these new experiences can turn into new beginnings over and over again.

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Endnotes

[1] PE in secondary schools in the Netherlands is a compulsory subject for all students. It is scheduled for 2 h a week; all PE classes are co-educational/gender mixed.

[2] For more insights into the unique ways in which ethnicity has been defined in the Netherlands, and some insights in how this impacts PE and PE teachers, see Van Doodewaard and Knoppers (2018).

[3] Former production sites can consist of land where there used to be a forest. Over time all trees were cut down and sold for timber, leaving the devastated land behind. These sites become spaces where mushrooms and roots of trees often form their own assemblages of co-existence, especially in precarious spaces. This process benefits both the roots and the mushrooms.

[4] PE Teacher Educator institutes in the Netherlands ($n=6$) are organized as Universities of Applied Sciences. By completing a four-year teaching degree, PE teachers become qualified to (only) teach PE to children and youth from 4 to 20 years old.

[5] See for instance a somersault from a platform which is built in a climbing rack: https://www.youtube.com/watch?v=kUnHQzjeuqw.

[6] In this project, we drew on the merits of the idea of a social circus that puts wellbeing at its centre: a wellbeing that is closely intertwined with a sense of community. Social circus is an art form in which practitioners can be 'themselves' and perform tricks in their own way and on their own terms. To prevent readers from applying stereotypical projections such as 'freaky' or 'supernatural' to circus performances and artists, we focused on playfulness and joint practice in the project, in order to stimulate shifts towards new social and discursive positions for all participants (Löf, 2021).

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