

Inclusive education for students with challenging behaviour: development of teachers' beliefs and ideas for adaptations through Lesson Study

Hanne Kristin Aas, M. Uthus & A. Løhre

To cite this article: Hanne Kristin Aas, M. Uthus & A. Løhre (2024) Inclusive education for students with challenging behaviour: development of teachers' beliefs and ideas for adaptations through Lesson Study, *European Journal of Special Needs Education*, 39:1, 64-78, DOI: [10.1080/08856257.2023.2191107](https://doi.org/10.1080/08856257.2023.2191107)

To link to this article: <https://doi.org/10.1080/08856257.2023.2191107>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 17 Mar 2023.



Submit your article to this journal [↗](#)



Article views: 4501



View related articles [↗](#)



View Crossmark data [↗](#)



Inclusive education for students with challenging behaviour: development of teachers' beliefs and ideas for adaptations through Lesson Study

Hanne Kristin Aas , M. Uthus and A. Løhre

Department for Teacher Education, Norwegian University for Science and Technology, Trondheim, Norway

ABSTRACT

This paper explores development in teacher beliefs and ideas for adaptations with respect to students who display challenging behaviour. These students have the same right to inclusive education as other students, but evidence suggest that this still is a partially unsolved issue. The study's context is an elementary school using Lesson Study as method for professional development over a four-year period. We have used content analysis and compared teacher talk during planning meetings at the beginning and end of the four years. The main findings are increased attention towards student behaviour, increased use of contextual explanations for student behaviour, a marked increase in ideas for adaptations, and ideas changing from exerting external control to engaging students in learning activities. The findings are discussed as to whether they support inclusion and how Lesson Study might have contributed.


KEYWORDS

Inclusion; challenging behaviour; teacher beliefs; adaptation; Lesson Study

Introduction

As inclusion has become an ideal for schools, most teachers must handle a diverse group of students within their classrooms. The difficulties in handling diverse needs in mainstream classrooms are reported by several researchers (see e.g. OECD 2014). Woodcock and Hardy (2017) noted that teachers found it excessively demanding to plan for the needs of all students. Students with challenging behaviour are also seen as difficult to include and teachers are found to hold more negative attitudes towards inclusion of students with behavioural challenges than other types of needs (Willmann and Seeliger 2017). Student (mis)behaviour is regarded as troublesome to classmates (Infantino and Little 2005), recognised as a major contribution to teacher stress (Skaalvik and Skaalvik 2017), and can make teachers feel frustrated, discouraged, and insufficient (Gidlund 2018).

The concept of *challenging behaviour* covers a wide range of behaviours and is repeatedly referred to as problematic in research because there are so many different definitions and terms in use. Some terms, often based on diagnostic systems, describe challenging behaviour as deficiencies or disorders, such as Disruptive Behaviour Disorders (Babinski and Waschbusch 2022). Other terms refer to contextual factors and define challenging

CONTACT Hanne Kristin Aas  hanne.k.aas@ntnu.no

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

behaviour as failure to follow behavioural norms in the classroom or in terms of negative consequences for learning. The different terms used to describe unwanted student behaviour does, to some degree, reflect different perspectives. In this paper, *challenging behaviour* is understood broadly as any kind of behaviour teachers experience as disturbing or impeding teaching and learning in the classroom. We consider the concept of challenging behaviour a cultural and social construct, reflecting prevailing norms and ideals; what constitutes a 'good student' will therefore vary across different contexts.

The focus of this paper is the beliefs teachers' have and their ideas for adaptations for students who display challenging behaviour in the classroom and how these enhance or hinder inclusion. Critically, the beliefs teachers have about why students behave in certain ways influences how teachers experience and therefore how they react to that behaviour. We explore development in teachers' beliefs and ideas for adaptations through a four-year project where a Norwegian elementary school used Lesson Study as a method for professional development. Lesson Study, originating in Japan, has increasingly gained interest globally. While a majority of research originates in Asia and the US, a growing number of European countries are represented in research (Fang and Wang 2021). Research on Lesson Study has mainly focused on developing academic teaching and learning, with maths and science most often represented (Xu and Pedder 2014). There is however, some research showing promising results regarding Lesson Study's relevance for developing inclusion (Norwich, Benham-Clarke, and Goei 2021), and with its emphasis on collaborative reflective practices, Lesson Study has the potential to promote inclusive education for students displaying challenging behaviour.

Theoretical frame

Teacher beliefs

Analyses of teachers' utterances regarding students' behaviour and teachers' ideas for adapting lessons are central to this paper, as is how these can be interpreted and understood as expressing underlying beliefs and affecting teacher actions in the classroom. Teacher beliefs describe assumptions and views teachers have about themselves, their students, and about learning and teaching (Pajares 1992). Beliefs can be described as a filter for interpreting experiences, framing problems, and guiding practice (Levin 2015). At an individual level, teacher beliefs are composed of all the various formal and informal influences teachers have encountered through their own schooling, teacher education and professional life (Buehl and Fives 2009). At a group level, beliefs form the basis for how a group understands different phenomena; a teacher collective, for example, will have its shared culture and norms that define 'correct' ways of understanding and acting. These shared beliefs constitute a powerful factor that influences various aspects of a school's routines and influence affective, motivational, and attitudinal aspects in teachers' professional practice (Tschannen-Moran, Salloum, and Goddard 2015). There are strong connections between teachers' beliefs and their classroom practice (Pajares 1992).

Teachers' beliefs are considered relatively stable and difficult to change. Part of the explanation is, according to Pajares (1992), that beliefs shape how we understand and interpret new experiences and therefore tend to be self-reinforcing. People notice,

remember, and interpret in ways that fit into their existing understanding of themselves and the world.

Studies indicate that the beliefs teachers have about the reasons for challenging student behaviour impact their willingness to change classroom practice (Nemer et al. 2019). Beliefs regarding the reasons for student behaviour can be classified as either individual or contextual. In an individual understanding, behaviour is understood to be caused by innate traits and abilities, while in a contextual understanding, it is understood to be caused by the situation (Messiou and Ainscow 2015; Skidmore 1999). If the cause is contextual, the behaviour can be related to inadequacies of the curriculum or inappropriate pedagogy, for example (Maguire, Ball, and Braun 2010). Researchers more often find that teachers ascribe the locus of challenging behaviours to the individual and go on to attribute it to deficit backgrounds and lack of internal control of the child (Orsati and Causton-Theoharis 2013). By attributing the cause to inherent traits, the most significant factor for the students learning and behaviour is seen as beyond the teacher's control. This narrows what possibilities teachers see for the students and decreases their own feeling of responsibility, both of which negatively affect how they respond to student needs. If teachers, on the other hand, attribute challenging behaviours to contextual factors within their control, they tend to be more likely to seek out effective solutions to the behaviour (Nemer et al. 2019).

A contextual understanding implies trust on the part of the teacher, both in their own ability to meet student needs, as well as trust in the student's competence and willingness to participate in meaningful ways (Goddard, Tschannen-Moran, and Hoy 2001). There is, however, an implied risk for the teacher; taking more responsibility means accepting responsibility for failure, if one does not succeed. Kelchtermans (2009) writes about teacher vulnerability and describes the challenge implicit in the teaching profession in balancing placement of control 'between exhausting personal commitment and cynical disengagement' (p. 266). Emotional support is considered an important component in developing new thinking about student behaviour (Naraian, Ferguson, and Thomas 2012).

Inclusion is more likely to occur if students' challenges are believed to be a result of conditions in their context (Dyson and Millward 2000). This means that some beliefs can be considered more productive than others; a contextual understanding of challenging beliefs is more likely to create opportunities for teachers to rethink their practices, and to position them as having the power, authority, and responsibility to cope with the problem.

Inclusive practices and strategies for adaptation

Inclusion is defined by UNESCO (2003) as an ongoing process of addressing and responding to the diversity of needs of all students with a conviction that it is the responsibility of the regular school system to educate all children. There is international agreement on the ideal of an inclusive school, but differences in how inclusion as a practice is understood; many countries report a gap between intention and reality, making the translation of inclusive ideas into actual practices a frequent challenge (Haug 2017). There is also limited research on how teachers in mainstream classrooms can develop more inclusive practices (Amor et al. 2019). In this paper, we assume that some students are more vulnerable than others, and that their needs

must be acknowledged and met with support. This framing presents a challenge for attending to individual differences while actively avoiding the marginalisation of learners or exclusion of groups (Pantić and Florian 2015).

One way of handling diversity in the classroom is through adaptive teaching: adjusting lesson planning and teaching practice to the diverse needs of students (Vogt and Rogalla 2009). Ideally, the adaptations should contribute to inclusion, with all students being able to participate in the classroom learning community (Qvortrup and Qvortrup 2018). If some students are given activities or treated in ways that differ too much from the rest of the class, they can end up being excluded despite being physically present; this is what Allan (2006) has called “the repetition of exclusion”. To avoid this, adaptive teaching should be conceptualised not as individualisation of instruction, but rather as creating and expanding what Corno (2008) calls “a middle ground”, by targeting ways to bring disparate groups of students together so they can benefit from the same instruction.

Research on the strategies teachers choose in working with challenging behaviour often paint a discouraging picture where external control, sanctions, and exclusion dominate (Hepburn, Beamish, and Alston-Knox 2021; Orsati and Causton-Theoharis 2012) and control and discipline overrule learning and participation (Egeberg, McConney and Price 2021; Maguire, Ball, and Braun 2010). Strategic interventions have primarily focused on reducing unwanted behaviour rather than developing academic achievement. The connection between behaviour and learning is complex; it is possible that academic problems can cause or exacerbate behavioural problems, which then serve as an escape from the threat of academic failure (van der Worp-van der Kamp et al. 2014). In line with this, Gregory et al. (2021) claim that matters of discipline too often are divorced from instructional matters, referring to research showing that students who have good conditions for learning are less likely to be involved in disruptive behaviours.

Good conditions for learning, academic engagement (Sullivan et al. 2014), and a positive relationship between teacher and student (Orsati and Causton-Theoharis 2012) are among factors shown to reduce challenging behaviour.

Lesson Study

Lesson Study is a systematic approach to professional development that embodies many key aspects of effective professional development (Willems and Van den Bossche 2019). In Lesson Study, teams of teachers work together in communities to develop their practice. At the core of the method is the research lesson, where the teacher teams collaborate to formulate goals for student learning and long-term development and plan this lesson in detail. The teacher teams then conduct the lesson with one team member teaching and the others observing to gather evidence on student learning and development. Afterwards, the team meets to reflect on and discuss the evidence gathered during the lesson. In the last stage of the Lesson Study cycle, all teams meet to share and discuss their learning, providing opportunities for collective learning and development of the school culture (Lewis 2002). By observing different students, the teachers get access to the ways students respond and learn from the lesson. This strong focus on student thinking and learning is central to Lesson Study. The goal of Lesson Study is not primarily to produce good lessons but is more accurately described as a research process intended to produce teacher learning to improve future instruction (Stigler and Hiebert 2009).

Timperley and Alton-Lee (2008) found that reflections on how teaching affects students is a central professional development activity that promotes teacher learning. In addition to observing student learning in the research lesson, teachers are supposed to anticipate student response as a part of planning the lesson. Trying to imagine how the students will experience the lesson is seen as an important part of the process (Fuji 2014). This is termed *cognitive empathy*: trying to understand the students' situation, take on their perspectives, and understand their thoughts, motivations, and motives (Cerbin and Kopp 2006). These perspectives can then be used in adapting the lesson, in order to better support the students (Aas 2021). Lesson Study systematically provides opportunities for teachers to practice this kind of cognitive empathy.

There are a few research projects in the European context addressing the use of Lesson Study and its relevance for inclusive education, but to our knowledge none that has explored the issue of challenging behaviour.

We have compared teachers' talk about challenging behaviour and ideas for adaptations at the beginning and end of the four-year Lesson Study-period. The aim of this comparison is to explore development best represented by the following questions:

- What behaviour do the teachers talk about and what beliefs are represented in their talk?
- What ideas for adaptations do the teachers suggest in meeting behaviour they find challenging?

The findings are discussed as to whether they support inclusion and we also reflect on what features in Lesson Study might have contributed to the changes we found.

The study

Context

The current study is part of a larger project that took place in one elementary school in mid-Norway, which implemented Lesson Study for professional development. The school had approximately 370 students from grades 1 to 7, with 3–5 teachers in each grade, forming the Lesson Study-teams. Norwegian legislation gives all students the right to attend their local school, with curriculum adapted to their needs, and, if necessary, with additional support. Norway has a relatively long tradition of inclusion, also for students presenting challenging behaviour. From the late 1960s, special education has gradually been reorganised with emphasis on equality, normalisation, and decentralisation, and from 1997, inclusion became a leading principle. Almost all children attend public schools, with only 0.7% receiving their education in special schools or units (Udir 2020).

The participating school had a diverse group of students. Students' educational needs were mainly handled through support in the regular classroom, with some use of smaller groups. In a baseline study conducted before starting the Lesson Study work, the teachers were united in having a positive attitude towards inclusion. Their understanding of inclusion emphasised social belonging, participation and learning. Some teachers found inclusion difficult to fully achieve, and many wanted more support in better adapting their lessons for diverse groups of students.

Inclusion of students with challenging behaviour was not an expressed goal for the project but emerged as a field of interest during analyses of other aspects in the project. The school leaders wanted to use Lesson Study to develop different qualities in the school, but all students, including those with behavioural challenges, participated in all the research lessons. The project period was four years, from 2015 to 2018, with all teachers and school leaders involved and the teachers completing nine Lesson Study cycles during this period. The teams had two planning meetings and one evaluation meeting in each cycle.

Method

The study is qualitative and longitudinal, following one elementary school in their Lesson Study-work through four years. Data consist of audio recordings from meetings where teacher teams planned research lessons: four teams from the first two Lesson Study-cycles in 2015 (10 h 34 m), and four from the last two in 2018 (13 h 9 m). These have been analysed with a combination of inductive and deductive approaches, using different types of content analysis (Hsieh and Shannon 2005). From the raw data, procedures for a selective protocol were followed, and sequences where teachers talked about student behaviour and possible adaptations to cope with the behaviours were sorted out as units of analysis and transcribed verbatim. The transcripts were manually coded to retain closeness and overview of the context of the utterances. The first step in the analysis was to mark all utterances concerning student behaviour. These were coded in a combination of theory- and data-driven processes and resulted in a coding frame where the utterances were sorted as to the behaviour they concerned and the beliefs they represented. Content analysis gives opportunity for quantification to explore the usage of certain words or content (Hsieh and Shannon 2005) and frequencies in the different categories were counted in a summative analysis. Two researchers carried out the coding independently, and intercoder reliability (O'Connor and Joffe 2020) after the initial coding was scored at 93.3%. Decisions on the remaining utterances were taken by the first author after re-reading them in the transcribed context.

The next step in the analysis was to conduct a similar process with the different ideas for adaptations: marking, coding, and quantification. The transcriptions from 2015 and 2018 were first coded separately, following the same procedure, and then compared. The coding schemes then, as a third step, served as a starting point for further data exploration. Inspired by concept coding (Saldaña 2015), the transcribed sections were coded again, looking for patterns with the intention of conceptualising more abstract and general codes that could describe traits and development in the teacher's beliefs about student behaviour, as well as their ideas for adaptations.

Findings

Challenging behaviour – types and beliefs

In this study, we have defined *challenging behaviour* as all kinds of behaviour teachers talked about as disturbing or impeding teaching and learning in the classroom. Regarding the types of behaviour that teacher teams talked about, utterances have been sorted in two inductively developed categories: unwanted activity and unwanted passivity. As to

what beliefs about behaviour the utterances represent, they have been sorted according to whether they represent the theoretical construct of individual trait or contextual condition as the cause of the behaviour. In addition, all utterances were sorted based on whether they were in regard to individuals or groups of students.

As shown in Figure 1, (place Figure 1 near here) the number of utterances about challenging behaviour doubled between 2015 and 2018. There was also a marked turn from talk about individual students towards groups of students or, in some cases, the whole class.

Unwanted activity was the most frequent theme at both times, although the percentage of utterances concerning unwanted passivity increased from 22 to 36%. When it comes to what beliefs the utterances represented, contextual conditions increased from 11% in 2015 to 31.5% in 2018.

Further exploration of changes in the utterances showed that in 2015, unwanted activity was often associated with students lacking concentration or motivation, resulting in them disturbing the lesson: *'What will happen then, will he just do other things? Yes, that has happened many times, and then it's very difficult to get him back on track'*. Terms such as 'falling out', 'losing concentration', and 'disruption' were frequent. Unwanted passivity was most often associated with shyness or anxiousness. In 2018, many of the same themes regarding unwanted activity were present, but there were additional utterances concerning a lack of consideration and listening to other opinions: *'Many of them are most concerned with expressing their own opinion. They should also be able to listen in to what their (learning) partner wants to contribute'*. Utterances regarding unwanted passivity were more nuanced, still mentioning shyness and anxiousness, but also a lack of initiative, self-confidence and self-assertion: *'Nick was struggling. Yes, we have some students that give in immediately . . . almost erasing themselves'*.

In 2015, beliefs regarding reasons for students' behaviour was predominantly ascribed to individual student traits: *'We must consider Ben and Paul; they will drop out quickly, so we need to keep them going'*. Teachers saw these traits as facts they just had to deal with. Individual traits are also represented by the majority of utterances in 2018, though contextual explanations represented a larger proportion: *'Yes, I thought that it could actually scare*

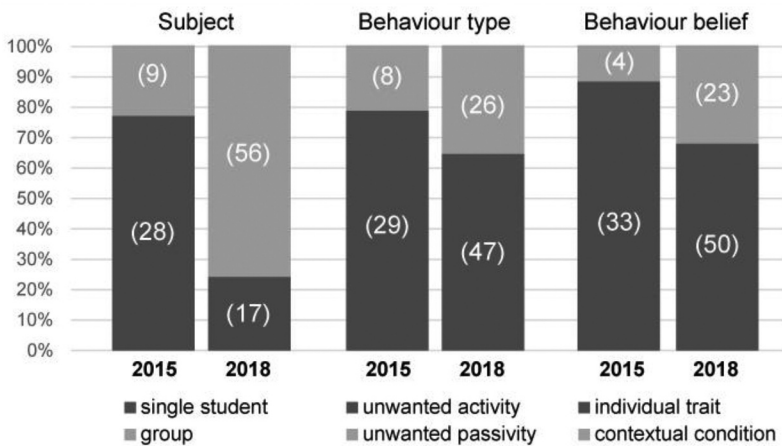


Figure 1. Coding, utterances student behaviour.

Table 1. Coding scheme, ideas for adaptations.

	Unwanted activity	Unwanted passivity	Total
2015	6	3	9
2018	16	13	29

some of them if we demand everyone to say something in front of the whole class. Some will probably withdraw if we do so'.

Adaptations

All ideas for adaptations considering challenging behaviour suggested in the teacher planning meetings are part of the data, to get an impression of what possibilities they see for adapting the lessons. As shown in Table 1 (place Table 1 near here), there was a considerable increase in the number of ideas for adaptations, from 9 to 29. In both 2015 and 2018, there were more ideas for adaptations regarding unwanted activity.

The 2015 adaptations fall into two categories: external control related to unwanted activity and the physical location of students in the classroom. With external control, utterances were similar to, *'We have to stay close to John to keep him on track'*. The adaptations suggested for this category were variations of the same theme: that the teachers had to control some students' behaviour by being physically close. For the location of students in the classroom, teachers said things such as, *'We must move him to a place where he won't be disturbed as much as he is now'*. Placing the student elsewhere in the classroom was suggested both to reduce unwanted activity and passivity.

The ideas for adaptations in 2018 were both more numerous and more diverse. Regarding unwanted activity, the teachers suggested adaptations in the following categories:

- Content mastery: *'We can have different complexity in the concepts they work with'*. The teachers discussed how some students could have difficulties with the content and suggested an array of strategies to make the tasks manageable for all students: open-ended tasks, differentiation, cooperation, designing the first part of a task to be easier, and preparing some students.
- Motivating learning activities: *'If we design some practical tasks, we will get them to participate'*. The teachers discussed learning activities in terms of whether they motivated and engaged the students and suggested student-active, practical, cooperative, and game-like activities.
- Adding meaning: *'Afterwards, they can present their understanding of one of the concepts to the others'*. The teachers discussed motivation and suggested different ways the students work could be used: by presenting to others, used in a parent meeting, or shared in the class.
- Rehearsal: *'They have to practice how to move between the different learning stations to understand the system'*. The teachers discussed what skills different learning activities demanded from the students and acknowledged the students' need to practice these skills.

In 2018, none of the ideas for adaptations concerned external control.

Regarding unwanted passivity, in 2018, the ideas for adaptations concerned two areas: student's anxiety and their lack of initiative and self-confidence. The adaptations aimed at reducing anxiety revolved around increased safety: soothing students' fear of making mistakes by demonstrating multiple approaches or solutions to a given task and having students talk within smaller groups instead of to the whole class. Some adaptations aimed at bolstering student initiative and self-confidence can be placed in the category of rehearsal, but teachers also discussed how to support students in developing strategies for what to do when they experienced uncertainty, other than asking the teacher or sitting passively. There were also discussions about teachers having to let go of some of the control in the classroom: *'We must let them find out for themselves more, not talk and talk about what they should do'*. These kinds of discussions were often in connection with unwanted passivity on the part of students and expressed a desire for more active participation and contribution from students in the lessons.

Discussion

The purpose of this paper is to explore changes in teachers' beliefs and ideas for adaptations regarding challenging behaviour in support of inclusion during the four years of professional development with Lesson Study. Our main findings show changes in several areas relevant to inclusion: more attention given to challenging behaviour (including unwanted passivity), more contextual beliefs about behaviour, a marked increase in ideas for adaptations, and adaptations shifting from the aim of quieting unruly students to the support of academic mastery, motivation, and meaning. In this section, we will discuss the findings' relevance for inclusion and reflect on what features in Lesson Study might have contributed to the changes we found.

Developing beliefs

Challenging behaviour was a theme that occupied the teacher teams in this study. The behaviour they talked about was generally relatively trivial, with minor disturbances dominating. Findings show a marked increase in attention to student behaviour and likewise attention to groups of students rather than individuals. There was also increased attention to student passivity as exemplified by a dearth of initiative, independence, and self-confidence. The beliefs shown in 2015 are in line with other research, where individual explanations for behaviour are predominant (Orsati and Causton-Theoharis 2012). Findings from 2018 show a marked difference, with descriptions of student behaviours being more often described as related to circumstances in the context of the classroom. Instead of explanations emphasising students' individual traits, the teachers discussed how different aspects of their teaching could make students feel uncertain, demotivated or discouraged, resulting in unwanted behaviour. This turn towards a contextual understanding of student needs was combined with a change in what the teachers expected from the students. In the 2015 discussions about behaviour, the main aim seemed to be compliance and order, while the 2018 discussions articulated a different set of expectations for student behaviour. Teachers' appreciation of what constitutes 'a good student' seems to have changed from that of a compliant recipient to one of an active and self-controlling participant. Teachers typically experience challenging behaviour as stressful

and frustrating, and this can give rise to a feeling of failing as a teacher (Gidlund 2018). It can therefore be particularly tempting to distance oneself and place the problem within the student because doing so eases responsibility and discomfort. This does not contribute to a solution; on the contrary, it can intensify the problem and push the students away from the learning community in their classes. By seeing themselves as part of the problem, the teachers also became part of the solution.

Developing ideas for adaptations

The ideas teachers had for adaptations reflect their beliefs about the causes of student behaviour. In 2015, the suggested adaptations were aimed at controlling student behaviour, often through the teachers' physical presence: 'being close to' and 'looking after'. This strategy has the potential to lead to repeated negative interactions between student and teacher, with the student breaking the rules and the teacher correcting them. Such interactions can easily increase frustration for both student and teacher and damage the relationship between them. Because a positive relationship between teacher and student is among the factors that reduce challenging behaviour, (Orsati and Causton-Theoharis 2012) these types of interactions can exacerbate the problem instead of reducing it. In addition, research has shown that students with challenging behaviour are regarded as troublesome to classmates (Infantino and Little 2005). Hence, having the rest of the class as an audience, witnessing negative interactions between student and teacher has the potential to affect their view of the student, with possible and possibly negative impact to the student's social status.

The ideas for adaptations in 2018 reflect the changed beliefs and show that teachers' belief in challenging behaviour being triggered by contextual factors gave rise to a multitude of ideas for adapting the context. The aim of the adaptations was not control of student behaviour, but instead improvement of their learning conditions. This change yields two important insights: first, that student misbehaviour can be a result of a lack of mastery, motivation, and meaning; second, that behaviour is closely connected to both learning and learning conditions. According to (2021), behavioural issues are too often handled as detached from instructional issues. If learning conditions are good, students are less likely to display challenging behaviour. The types of adaptations suggested in 2018, directed towards improving learning conditions for all students, are likely to succeed in reducing challenging behaviour. The reduction occurs not by disciplining individual students to be quiet, but by engaging all students in learning activities. This underlines the importance of academic support and academic inclusion – after all, a school's most critical feature is academic learning.

The increased attention given to student passivity in students is also interesting. In 2015, when the teachers mentioned passivity as a challenge, it was almost always linked to shyness and unwillingness to participate in classroom activities on the part of individual students. In 2018, shy students were still mentioned, but the teachers also talked about other kinds of passivity as challenging, namely, lack of initiative and self-confidence. We have assumed challenging behaviour to be a cultural and social construct and this change in teachers' concern can be interpreted from such a perspective. It is apparent that the concept of 'passivity' was redefined in the teacher teams. There was a pivot towards a desire for more student-active lessons in the course of the four years of

Lesson Study-work. This changed the students' role in the lessons, requiring their active participation and initiative instead of sitting quietly at their desks. This turned out to be difficult for many students and created new behavioural challenges for the teachers. One example of a new challenge was students signalling a need for affirmation from the teachers that they had done something correctly, instead of finding out for themselves. The previously mentioned discussions teachers had about having to let go of some of the control in the classroom so that students could develop self-control can be seen as a change in how the teacher teams conceptualised both 'good' and 'challenging' behaviour in students.

Reflections on Lesson Study's contribution

The design of this study does not provide a basis for concluding anything definitive about the causes for the changes that occurred. However, we want to end this discussion by reflecting on some features in Lesson Study that may have contributed to the changes we found.

In line with other research on Lesson Study, our findings demonstrate a greater teacher awareness and insight into student needs (Xu and Pedder 2015), though this does not automatically lead to more inclusive adaptations. The insights could have led the teachers to creating more individualised differentiation for students, thereby pushing them away from the learning community, and resulting in 'repetition of exclusion' (Allan 2006). However, the opposite happened: teachers shifted their attention from students as individuals and towards groups of students, with concomitant discussion on ways to improve learning conditions by adapting regular lessons. One possible explanation for this is the strong focus on student learning in Lesson Study. When teachers observe the research lesson, it is students' learning processes they are expected to explore. This might have served to shift attention from the behaviour itself and towards what was discussed as inadequate learning conditions. It may also have provided them with insight into how learning conditions, student needs, and student behaviour are all connected.

Through the four years, the teachers not only repeatedly observed student learning in the research lessons, they also had to anticipate how they thought their students would respond to the lessons as part of the planning. This exercise in trying to imagine how the lesson might be experienced from a student's point of view (cognitive empathy), pushed teachers to articulate possible motives for students being passive, anxious, or displaying disruptive behaviour. These parts of the discussions seemed to expand the teachers' understanding of the students, thereby triggering ideas for how to improve learning conditions. The opportunity to practice the cognitive empathy inherent to Lesson Study (Cerbin and Kopp 2006) is a possible key to the changes found in this study.

Finally, of note is the emotional strain that challenging behaviour seems to be for teachers, making them feel stressed, discouraged, and insufficient (Gidlund 2018; Skaalvik and Skaalvik 2017). The urge to place responsibility within the student can be understood as an emotional survival-mechanism for teachers in response to this strain. Because inclusive practice implies a great deal of responsibility for teachers, there is also a great deal of risk. Naraian, Ferguson, and Thomas (2012) emphasise emotional support as an important precondition for teachers developing new thinking about student behaviour. Lesson Study has some features that serve to provide emotional support for teachers. The primary is that

teams of teachers plan the research lesson together. This equates to shared responsibility and shared risk. Because it is *we* who plan, *we* can be more creative and bold as *we* share the burden of potential failure. Another feature is the strong focus on students learning can take some of the pressure away from individual teacher performances, as it is not about the good teacher, rather about designing lessons that give students a good learning environment.

Conclusion

When we assume that challenging behaviour is a cultural and social construct, reflecting prevailing norms and ideals, it becomes clear why inclusion is important for students that display challenging behaviour: different groups have different norms, and it is critical that students feel part of the classroom community in order for them to accept and follow the norms within it.

In this paper, we have emphasised inclusion as responding to the diversity of needs of all students, and attending to individual differences by adapting teaching in ways that makes the regular lesson accessible to all. It is against this backdrop that the development shown in our study can be understood to contribute to a more inclusive practice: the more teachers ascribed challenging behaviour to context, the more ideas they had for adapting lessons. Adaptations shifted from external control towards supporting self-control and showed that the teachers were connecting students' behaviour with the learning conditions. The teachers' utterances indicate that they have reconceptualised their understanding of what constitutes 'a good student', from one who is obedient and passive, to one who is active, self-driven, and self-controlling. This led to a change in the kind of behaviour teachers described as challenging.

In hypothesising about how Lesson Study may have contributed, more insight into student needs, combined with a strong focus on learning, as well as opportunities for practicing cognitive empathy and providing emotional support for the teachers seem to be contributing features.

Data analysed here was teachers' discussions, so what the teachers actually did in their classrooms is beyond the purview of this study. One possibility for further research could therefore be to explore whether and how teachers' beliefs become visible in their teaching and how this affects student behaviour and learning. Another theme worth of further attention is the subjective aspect of inclusion and the question of how the students themselves experienced the lessons.

Disclosure statement

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

ORCID

Hanne Kristin Aas  <http://orcid.org/0000-0001-6033-0966>

References

- Aas, H. K. 2021. "Learning Through Communication: Exploring Learning Potential in Teacher Teams Lesson Study Talk." *International Journal for Lesson & Learning Studies* 10 (1): 47–59. doi:10.1108/IJLLS-07-2020-0046.
- Allan, J. 2006. "The Repetition of Exclusion." *International Journal of Inclusive Education* 10 (2–3): 121–133. doi:10.1080/13603110500221511.
- Amor, A. M., M. Hagiwara, K. A. Shogren, J. R. Thompson, M. Á Verdugo, K. M. Burke, and V. Aguayo. 2019. "International Perspectives and Trends in Research on Inclusive Education: A Systematic Review." *International Journal of Inclusive Education* 23 (12): 1277–1295. doi:10.1080/13603116.2018.1445304.
- Babinski, D. E., and D. A. Waschbusch. 2022. "Disruptive Behavior Disorders in Children and Adolescents." *Reference Module in Neuroscience and Biobehavioral Psychology* 5: 412–423. doi:10.1016/B978-0-12-818697-8.00065-0.
- Buehl, M. M., and H. Fives. 2009. "Exploring Teachers' Beliefs About Teaching Knowledge: Where Does It Come From? Does It Change?" *Journal of Experimental Education* 77 (4): 367–408. doi:10.3200/JEXE.77.4.367-408.
- Cerbin, W., and B. Kopp. 2006. "Lesson Study as a Model for Building Pedagogical Knowledge and Improving Teaching." *International Journal of Teaching and Learning in Higher Education* 18 (3): 250–257. <http://www.isetl.org/ijtlhe/>.
- Corno, L. 2008. "On Teaching Adaptively." *Educational Psychologist* 43 (3): 161–173. doi:10.1080/00461520802178466.
- Dyson, A., and A. Millward. 2000. *Schools and Special Needs: Issues of Innovation and Inclusion*. London: Sage.
- Egeberg, H., A. McConney, and A. Price. 2021. "Teachers' Views on Effective Classroom Management: A Mixed-Methods Investigation in Western Australian High Schools." *Educational Research for Policy and Practice* 20 (2): 107–124. doi:10.1007/s10671-020-09270-w.
- Fang, Y., and H. Wang. 2021. "Trends of and Implications for the Diffusion of Lesson Study: Thematic Analysis of WALSS2019 Conference Presentations." *International Journal for Lesson & Learning Studies* 10 (1): 61–74. doi:10.1108/IJLLS-09-2020-0063.
- Fujii, T. 2014. "Implementing Japanese Lesson Study in Foreign Countries: Misconceptions Revealed." *Mathematics Teacher Education and Development* 16: 65–83. <https://files.eric.ed.gov/fulltext/EJ1046666.pdf>.
- Gidlund, U. 2018. "Teachers Attitudes Towards Including Students with Emotional and Behavioural Difficulties in Mainstream School: A Systematic Research Synthesis." *International Journal of Learning, Teaching and Educational Research* 17 (2): 45–63. doi:10.26803/ijlter.17.2.3.
- Goddard, R. D., M. Tschannen-Moran, and W. K. Hoy. 2001. "A Multilevel Examination of the Distribution and Effects of Teacher Trust in Students and Parents in Urban Elementary Schools." *The Elementary School Journal* 102 (1): 3–17. doi:10.1086/499690.
- Gregory, A., D. Osher, G. Bear, R. J. Jagers, and J. R. Sprague. 2021. "Good Intentions are Not Enough: Centering Equity in School Discipline Reform." *School Psychology Review* 50 (2–3): 206–220. doi:10.1080/2372966X.2020.1861911.
- Haug, P. 2017. "Understanding Inclusive Education: Ideals and Reality." *Scandinavian Journal of Disability Research* 19 (3): 206–217. doi:10.1080/15017419.2016.1224778.
- Hepburn, L., W. Beamish, and C. L. Alston-Knox. 2021. "Classroom Management Practices Commonly Used by Secondary School Teachers: Results from a Queensland Survey." *The Australian Educational Researcher* 48 (3): 485–505. doi:10.1007/s13384-020-00402-y.
- Hsieh, H. F., and S. E. Shannon. 2005. "Three Approaches to Qualitative Content Analysis." *Qualitative Health Research* 15 (9): 1277–1288. doi:10.1177/1049732305276687.
- Infantino, J., and E. Little. 2005. "Students' Perceptions of Classroom Behaviour Problems and the Effectiveness of Different Disciplinary Methods." *Educational Psychology* 25 (5): 491–508. doi:10.1080/01443410500046549.

- Kelchtermans, G. 2009. "Who I Am in How I Teach is the Message: Self-Understanding, Vulnerability, and Reflection." *Teachers and Teaching: Theory and Practice* 15 (2): 257–272. doi:[10.1080/13540600902875332](https://doi.org/10.1080/13540600902875332).
- Levin, B. B. 2015. "The Development of Teachers' Beliefs." In *International Handbook of Research on Teachers' Beliefs*, edited by H. Fives and M. G. Gill, 48–65. New York: Routledge.
- Lewis, C. 2002. *Lesson Study: A Handbook of Teacher-Led Instructional Improvement*. Philadelphia: Research for better schools.
- Maguire, M., S. Ball, and A. Braun. 2010. "Behaviour, Classroom Management and Student 'Control': Enacting Policy in the English Secondary School." *International Studies in Sociology of Education* 20 (2): 153–170. doi:[10.1080/09620214.2010.503066](https://doi.org/10.1080/09620214.2010.503066).
- Messiou, K., and M. Ainscow. 2015. "Responding to Learner Diversity: Student Views as a Catalyst for Powerful Teacher Development." *Teaching and Teacher Education* 51: 246–255. doi:[10.1016/j.tate.2015.07.002](https://doi.org/10.1016/j.tate.2015.07.002).
- Naraian, S., D. L. Ferguson, and N. Thomas. 2012. "Transforming for Inclusive Practice: Professional Development to Support the Inclusion of Students Labelled as Emotionally Disturbed." *International Journal of Inclusive Education* 16 (7): 721–740. doi:[10.1080/13603116.2010.509817](https://doi.org/10.1080/13603116.2010.509817).
- Nemer, S. L., K. S. Sutherland, J. Chow, and R. L. Kunemund. 2019. "A Systematic Literature Review Identifying Dimensions of Teacher Attributions for Challenging Student Behavior." *Education & Treatment of Children* 42 (4): 557–578. doi:[10.1353/etc.2019.0026](https://doi.org/10.1353/etc.2019.0026).
- Norwich, B., S. Benham-Clarke, and S. L. Goei. 2021. "Review of Research Literature About the Use of Lesson Study and Lesson Study-Related Practices Relevant to the Field of Special Needs and Inclusive Education." *European Journal of Special Needs Education* 36 (3): 309–328. doi:[10.1080/08856257.2020.1755929](https://doi.org/10.1080/08856257.2020.1755929).
- O'connor, C., and H. Joffe. 2020. "Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines." *International Journal of Qualitative Methods* 19: 1–13. doi:[10.1177/1609406919899220](https://doi.org/10.1177/1609406919899220).
- OECD. 2014. *TALIS 2013 Results: An International Perspective on Teaching and Learning*. Paris: OECD Publishing. doi:[10.1787/9789264196261-en](https://doi.org/10.1787/9789264196261-en).
- Orsati, F. T., and J. Causton-Theoharis. 2013. "Challenging Control: Inclusive Teachers' and Teaching Assistants' Discourse on Students with Challenging Behaviour." *International Journal of Inclusive Education* 17 (5): 507–525. doi:[10.1080/13603116.2012.689016](https://doi.org/10.1080/13603116.2012.689016).
- Pajares, F. 1992. "Teachers' Beliefs and Educational Research: Cleaning Up a Messy Construct." *Review of Educational Research* 62 (3): 307–332. doi:[10.3102/00346543062003307](https://doi.org/10.3102/00346543062003307).
- Pantić, N., and L. Florian. 2015. "Developing Teachers as Agents of Inclusion and Social Justice." *Education Inquiry* 6 (3): 27311. doi:[10.3402/edui.v6.27311](https://doi.org/10.3402/edui.v6.27311).
- Qvortrup, A., and L. Qvortrup. 2018. "Inclusion: Dimensions of Inclusion in Education." *International Journal of Inclusive Education* 22 (7): 803–817. doi:[10.1080/13603116.2017.1412506](https://doi.org/10.1080/13603116.2017.1412506).
- Saldaña, J. 2015. *The Coding Manual for Qualitative Researchers*. Los Angeles: Sage publications.
- Skaalvik, E. M., and S. Skaalvik. 2017. "Dimensions of Teacher Burnout: Relations with Potential Stressors at School." *Social Psychology of Education* 20 (4): 775–790. doi:[10.1007/s11218-017-9391-0](https://doi.org/10.1007/s11218-017-9391-0).
- Skidmore, D. 1999. "Relationships Between Contrasting Discourses of Learning Difficulty." *European Journal of Special Needs Education* 14 (1): 12–20. doi:[10.1080/0885625990140102](https://doi.org/10.1080/0885625990140102).
- Stigler, J. W., and J. Hiebert. 2009. *The Teaching Gap: Best Ideas from the World's Teachers for Improving Education in the Classroom*. New York: Simon and Schuster, Free Press.
- Sullivan, A. M., B. Johnson, L. Owens, and R. Conway. 2014. "Punish Them or Engage Them? Teachers' Views of Unproductive Student Behaviours in the Classroom." *Australian Journal of Teacher Education* 39 (6): 43–56. doi:[10.14221/ajte.2014v39n6.6](https://doi.org/10.14221/ajte.2014v39n6.6).
- Timperley, H., and A. Alton-Lee. 2008. "Reframing Teacher Professional Learning: An Alternative Policy Approach to Strengthening Valued Outcomes for Diverse Learners." *Review of Research in Education* 32 (1): 328–369. doi:[10.3102/0091732X07308968](https://doi.org/10.3102/0091732X07308968).
- Tschannen-Moran, M., S. J. Salloum, and R. D. Goddard. 2015. "Context Matters: The Influence of Collective Beliefs and Shared Norms." In *International Handbook of Research on Teachers' Beliefs*, edited by H. Fives and M. G. Gill, 301–316. New York: Routledge.

- Udir, 2020. Utdanningsspeilet. [The Norwegian Directorate for Education and Training.] <https://www.udir.no/tall-og-forskning/publikasjoner/utdanningspeilet/utdanningspeilet-2020/>
- UNESCO. 2003. *Overcoming Exclusion Through Inclusive Approaches in Education, a Challenge and a Vision*. Paris: UNESCO.
- van der Worp-van der Kamp, L., S. J. Pijl, J. O. Bijstra, and E. J. van den Bosch. 2014. "Teaching Academic Skills as an Answer to Behavioural Problems of Students with Emotional or Behavioural Disorders: A Review." *European Journal of Special Needs Education* 29 (1): 29–46. doi:10.1080/08856257.2013.830444.
- Vogt, F., and M. Rogalla. 2009. "Developing Adaptive Teaching Competency Through Coaching." *Teaching and Teacher Education* 25 (8): 1051–1060. doi:10.1016/j.tate.2009.04.002.
- Willems, I., and P. Van den Bossche. 2019. "Lesson Study Effectiveness for Teachers' Professional Learning: A Best Evidence Synthesis." *International Journal for Lesson and Learning Studies* 8 (4): 257–271. doi:10.1108/IJLLS-04-2019-0031.
- Willmann, M., and G. M. Seeliger. 2017. "SEBD Inclusion Research Synthesis: A Content Analysis of Research Themes and Methods in Empirical Studies Published in the Journal Emotional and Behavioural Difficulties from 1996–2014." *Emotional and Behavioural Difficulties* 22 (2): 142–161. doi:10.1080/13632752.2016.1255441.
- Woodcock, S., and I. Hardy. 2017. "Probing and Problematizing Teacher Professional Development for Inclusion." *International Journal of Educational Research* 83: 43–54. doi:10.1016/j.ijer.2017.02.008.
- Xu, H., and D. Pedder. 2014. "Lesson Study: An International Review of the Research." In *Lesson Study: Professional Learning for Our Time*, edited by P. Dudley, 24–47. London: Routledge.