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A grounded theory about how teachers communicated high expectations to their secondary school students

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Abstract

High teachers' expectations are associated with improved student academic achievement. However, no research explains how students experience their teachers' expectations, from their points of view. A new theory was developed to achieve the study's aim of accounting for how high expectations were experienced by 25 students in Western Australia. The findings offer educators student-focused perspectives of how to convey high teacher expectations that lead to improved student academic outcomes. Straussian grounded theory (Strauss, 1990) methods were used to generate substantive theory together with the Year 10 students in three Western Australian public schools, through data including more than 100 classroom observations and 175 interviews. The theory generated from the data provides a lens for understanding how teachers communicated high expectations through *confidence*, *approach*, *relationship*, and *environment*. Students identified practices that communicated high expectations that add to existing knowledge in the literature. The students recognised high expectations, then described how they responded by becoming motivated, engaged in learning, and acting to improve their academic outcomes. Teachers might draw on the substantive theory to inform classroom interactions that communicate high expectations in their own teaching contexts.

Keywords Teacher expectations · Grounded theory · Teacher-student relationships · Student voice

Research about teacher expectations has long emphasised that teachers' ideas about students can become reality for students (Neuenschwander et al., 2021; Rosenthal & Jacobson, 1968).

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How can an idea that a teacher holds manifest in the reality of a students' academic achievement? Original knowledge about how students appraise and respond to high teacher expectations is presented in this paper, which accounts for teacher expectations effects from the student participants' perspectives. The research answers the question 'How do students' experience their teachers' expectations of them.' The answer to the question was generated together with 25 Year 10 students in Western Australia. A substantive, grounded theory was developed from data collected with the students. The theory could be used by teachers to inform their adoption of practices that convey high expectations to students.

The grounded theory presented in this paper is about how students respond to teacher expectations in ways that improve their educational outcomes. The theory was built together with the student participants so that their voices could be heard by their educators. Other teachers and decision makers might also transfer the knowledge to their own contexts and adapt their practices accordingly. Strategies that teachers can use to intentionally communicate high expectations are part of the theory's construction, adding new concepts to existing research in the field (Rubie-Davies, 2014; Valdes et al., 2021). Furthermore, the theory explains how high teacher expectations affect students' responses and actions towards improved learning outcomes.

Teachers' expectations are defined here as the beliefs that teachers hold about if, what, and when their students will accomplish academically at school (Brophy & Good, 1984; Rubie-Davies et al., 2014). There is acknowledgement in Australian Educational Policy and at the school level that teacher expectations play a role in students' learning (Australian Institute for Teaching & School Leadership, 2017). This acknowledgement has a solid basis in research showing that students' educational outcomes are related to their teachers' expectations of them (Hattie, 2008; Wang et al., 2018). A synthesis of the literature about teachers' expectations is summarised below.

Positive effects of high teacher expectations

Quantitative studies have shown a relationship between teachers' expectations and students' academic outcomes (Papageorge et al., 2020). A longitudinal study of 6060 students in America showed that teacher expectations of how far a Year 10 student would go in school had a predictive effect on the student's completion of a four-year college degree (Papageorge et al., 2020). Hattie's (2008) meta-analysis quantified the effect of teachers' expectations at an effect size of 0.43. This 'teacher expectation effect' can be particularly strong for some students, accounting for more than 60% of variance in achievement for some students but less than 3% for others (Jussim & Harber, 2005; Jussim et al., 1996). Thus, for some students, teacher expectations are pivotal for academic achievement.

International research has shown that expectations can play a significant role in students' academic attainment across learning contexts, including Australia (Gentrup et al., 2020; Sarra, 2017; Szumski & Karwowski, 2019). Longitudinal research from the Netherlands and the USA has highlighted the association between teachers' expectations for students' academic achievement and students' long-term success at school (Archambault et al., 2012; Hinnant et al., 2009). Students' future pathways are related to their teachers' expectations, especially in cases where students are from disadvantaged backgrounds, such as low socioeconomic statuses (SES) or some ethnic minority groups (Dabach et al., 2018; de Boer et al., 2010). Furthermore, the academic performance of students from disadvantaged backgrounds is more strongly associated with their teachers' expectations than

students from more privileged backgrounds (McKown & Weinstein, 2008; Rubie-Davies et al., 2006). These most vulnerable students are most likely to experience pronounced teacher expectation effects.

Teachers treat students differently according to expectations

This study sought to explore how students experience their teachers' expectations of them, and there is some literature that suggests that students experience teacher expectations through interactions that communicate differential teacher expectations in the classroom. Extensive research has shown that teachers develop these differential expectations of students based on pre-existing beliefs about students, according to factors like their ethnicities, SES, gender, and prior achievement (Neuenschwander et al., 2021; Nishen et al., 2022). Teachers then communicate their expectations to students and students have psychosocial responses (Wang et al., 2019). Observational research has found that when teachers use more differentiating behaviours, expectation effects increase (Bohlmann & Weinstein, 2013; Kuklinski & Weinstein, 2001). Differentiating behaviours include employing an ability-differentiated curriculum, performance-oriented motivation strategies, competitive evaluation strategies, and privileging teacher control over student choice (Bohlmann & Weinstein, 2013; Marshall & Weinstein, 1984).

High expectation teachers

Some students' teachers have generally higher expectations than others (Rubie-Davies, 2007; Wang et al., 2019). High expectation teachers use a facilitative approach, offer choices, and encourage student autonomy (Rubie-Davies, 2007; Weinstein, 2002). Teachers with high expectations in Australian studies have reported using a faster teaching pace, more student-centred pedagogies, and more open-ended learning with students for whom they had high expectations (Dulfer, 2015; Johnston et al., 2018). Teachers who have high expectations have also been found to give all students the same opportunities to learn and to continually monitor students' progress (Rubie-Davies et al., 2007).

Some research has considered the role that students' views of their teachers' expectations might play in teacher expectation effects on academic achievement. Instruments including the Teacher Treatment Inventory (Brattesani et al., 1984) and the Classroom Ability-Based Practices observation tool (Bohlmann & Weinstein, 2013) have also been used to verify that students' perceptions of their teachers' expectations mediate teacher expectation effects (Zhu et al., 2018). Further research using surveys of students has shown that high teacher expectations behaviours lead to improved student self-esteem or self-confidence (Friedrich et al., 2015; Trusz, 2018), but none of this research has explained how this occurs from the students' points of view.

Students' experiences of their teachers' expectations

There is little understanding of *how* students experience high teacher expectations, from their points of view. Weinstein's (2002) seminal study is the only research found that has sought to qualitatively explore students' experiences of their teachers' expectations of them. The book (Weinstein, 2002) reported findings about how primary school students experienced their teachers' expectations through teachers' differential treatment. The

accounts from the students were drawn from interviews and classroom observations that richly described the students' perceptions of where their teacher positioned them in the achievement hierarchy of the classroom. Year 2 students who experienced low teacher expectations reported eroded motivations and little hope that they could improve their academic outcomes in the future. Year 2 students who experienced high teacher expectations described pride and accomplishment, with some pressure to sustain their position at the high end of the achievement ladder. Weinstein's study is the only study known that included qualitative exploration of teachers' expectations from students' perspectives.

Other teacher expectations research has used students as a quantitative data source, validating adult and educator generated research findings and tools. For example, researchers have confirmed predictions that students' own self-ability ratings are related to teachers' differential behaviour in the classroom by surveying students (Bohlmann & Weinstein, 2013). Constructs from educational psychology related to student self-perceptions have been statistically associated with teacher expectations through student surveys, such as academic self-concept (Chen et al., 2011), self-concept (Friedrich et al., 2015), and self-esteem (Trusz, 2018). Students have also been surveyed about the hypothesised connection between their motivation or engagement and their teachers' expectations of them (Tyler & Boelter, 2008; Woolley et al., 2010). Other research still has looked back to teachers to describe their students' experiences of their expectations, using hypothetical vignettes and asking teachers to explain how students would respond (De Jong et al., 2012). None of this research has involved students in a process of generating substantive theory about how they experience their teachers' expectations of them.

Research approach

The study reported on in this paper aimed to generate new theory about how students experience their teachers' expectations of them. The main research question was: *How do students experience their perceived teachers' expectations of them?*

The research approach was informed by the development of a conceptual framework, which provided a blueprint for the research methods that followed (Osanloo & Grant, 2016). The conceptual framework for the research was developed through a systematic review of the literature. Reviews of the literature in grounded theory were not encouraged in the first version of grounded theory developed by Glaser and Strauss (1967). Glaser stipulated that literature reviews should be performed after data analysis because of the researcher would become "contaminated" and wind up "forcing the data with preconception" rather than allowing theory to emerge purely from the data (Glaser, 1992). However, subsequent versions of grounded theory including Strauss and Corbin's (2008) later version argue that all researchers approach research with preconceptions and pure induction is unlikely. Grounded theory researchers use literature review to open their mind to wider possibility and to develop "informed grounded theory" that is critically situated in existent knowledge while always grounded in the data (Thornberg, 2012). No researcher is a blank slate, so approaching the development of theory with an informed perspective of what research has found in a specific field is a realistic and critical necessity. Literature reviews allow the researcher to become critically aware of the myriad of possibilities existent in the literature already. Such awareness is useful for keeping focused on theory construction because the researcher knows how the codes and categories emerging fit within the field (Thornberg & Charmaz, 2014).

The literature review identified four main categories of existing research about teacher expectations: (1) teachers' expectations effect on student achievement, (2) how teachers form expectations of students, (3) teachers treat students differently according to expectations, and (4) students' reactions to teachers' expectations. The synthesis of the literature informed the conceptual framework, as can be seen in the blue portion of the conceptual framework in Fig. 1. Figure 1 summarises how the literature review (blue), the theoretical framework of symbolic interactionism (yellow), and grounded theory (orange) were drawn upon to develop a conceptual framework.

The conceptual framework was also informed by the theoretical framework of symbolic interactionism (Blumer, 1969). Glaser (1992) rejected any philosophical underpinnings for his version of grounded theory, but Strauss and Corbin (2008) acknowledged that grounded theory is rooted in the sociological theory of symbolic interactionism. The theory of symbolic interactionism explains that social worlds and individuals are co-constructed (Wright & Losekoot, 2010). The original theory was based upon the thinking of Blumer (1969), who asserted that people attach "meanings" to themselves and their world, and then base their actions on these meanings. The theoretical framework of symbolic interactionism is illustrated in the conceptual framework through the yellow boxes: "meaning construction–action–result" (Blumer, 1969; Handberg et al., 2015).

Grounded theory was selected as an appropriate qualitative methodology to achieve the study's aim of generating new theory because grounded theory is based upon a theoretical framework of symbolic interactionism (Corbin & Strauss, 2008). The conceptual framework draws on Strauss' classic coding paradigm of conditions, actions/interactions, strategies and tactics, and consequences (Strauss, 1990).

The conceptual framework provided a basis for exploring students' experiences of their teachers' expectations through symbolic exchanges of meaning during student–teacher classroom interactions (Blumer, 1969; Bohlmann & Weinstein, 2013). The conceptual framework was used to inform further guiding research questions, including: What do students see and hear teachers doing that communicates their expectations? How do they feel as a result? What do they do in response? What are the consequences for their achievement? These further guiding questions were adapted into a semi-structured interview schedule that was used to question the students after the classroom observations (see Appendix 1).
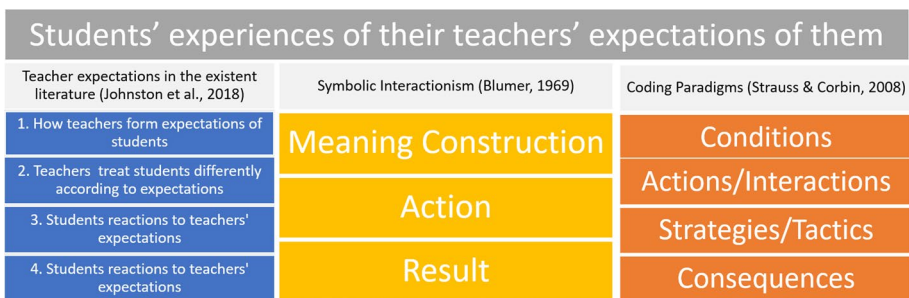

Students' experiences of their teachers' expectations of them		
Teacher expectations in the existent literature (Johnston et al., 2018)	Symbolic Interactionism (Blumer, 1969)	Coding Paradigms (Strauss & Corbin, 2008)
1. How teachers form expectations of students	Meaning Construction	Conditions
2. Teachers treat students differently according to expectations		Actions/Interactions
3. Students reactions to teachers' expectations	Action	Strategies/Tactics
4. Students reactions to teachers' expectations	Result	Consequences

Fig. 1 Conceptualising student experiences of their teachers' expectations of them

Research methods

Strauss and Corbin's (2008) grounded theory methods were used to achieve the study's aim of generating new substantive theory about students' experiences of interactions that communicated teacher expectations. Grounded theory is both a process and product of research (Thornberg & Dunne, 2019; Walker & Myrick, 2006), and it is an appropriate endeavour for studies that seek to develop new knowledge about participants' experiences (Chamberlain-Salaun et al., 2013; Corbin & Strauss, 2008). It is "grounded" because the theory that is generated is abstracted from, but always connected to, its base in the data (the ground). "Theory", for the Straussian grounded theory researcher, is a set of conceptual ideas that are integrated through induction and verified through deduction (Corbin & Strauss, 2008; Strauss, 1990). Substantive theory is a theory that represents a specified substantive group, in this case, the grade 10 students that participated in this study. Substantive theory is also sometimes referred to as "middle-range theory" because it is not grand theory that can be generalised across all populations, nor is it based on narrow case study (Thornberg & Dunne, 2019).

Western Australian secondary schools with mid-low levels of socioeconomic advantage in an urban school region were invited to participate via the school principal, with three schools providing consent. Public schools with mid-low levels of socioeconomic advantage were chosen because they were most likely to have students who were experiencing the effects of their teachers' expectations of them (Hinnant et al., 2009; Timmermans et al., 2016). A representative nominated by the principal from each school facilitated timetabling and introductions for the recruitment of students and teachers.

Once the researcher had established a familiar presence at each school, they were able to recruit students and teachers using theoretical sampling. Theoretical sampling is purposive, progressive data collection used by the grounded theory researcher to intentionally seek data that will further develop the theory (Corbin & Strauss, 2008). Data collection and analysis was completed each day, so that the continuous recruitment of students could inform iterative development of the theory.

Data collection and analysis: developing grounded theory that projects students' voice

To collect data, each participant student was observed in their classes, where an observation note-taking sheet was used to make notes about the interactions that occurred between the teacher and student that the student might bring up in the interviews afterwards. The observations were used to provide a shared understanding of context for the student and the researcher to draw upon in the interviews, which took place at the end of each day of observations. A semi-structured interview schedule was used to explore the students' responses to the guiding research questions, which were adapted into conversational questions such as "What did your teachers say or do today that communicated their expectations for your academic achievement?", "What was that like for you?", and "What did you do in response to your teachers' expectations?".

In total, 100 interviews with 25 students were conducted, drawing on more than 175 classroom observations across 36 different teachers' classes. The students were in secondary school, so each student was observed in all classes where their teachers consented for observations to take place. Thus, multiple students were observed at different

times in many classes, with observations for each student in anywhere from two classes to seven different classes. A full record of the observation and interview schedule is presented in Appendix 2 Table 1. Only one student at a time was observed and interviewed over the course of 1 week of his/her classes, with all data analysed using NVivo each night before further data were collected the next day. This iterative approach to data collection and analysis meant that the theory was developed together with the students, exploring the coding with them during the successive days of observations and interviews.

The students worked together with the researcher during the data analysis process. After tentative codes were developed by the researcher (Corbin & Strauss, 2008), students were consulted daily about the data analysis. Progressive analysis allowed for constant comparison of new data with the data that had already been collected, facilitating theoretical sampling (Corbin & Strauss, 2008; Kolb, 2012). For example, students were asked to verify how findings had been coded by the researcher showing the students what codes had been developed to check if they were accurate from the students' perspectives. The students also led further abstraction of the data through reference to integrative diagrams, which were shared with the students and discussed during the interviews. Other (anonymous) data indicators from other students were shared to see what comparisons the students could make, so that they were helping to construct the theory. By the time the 12th participant was interviewed, 200 open codes had been generated and verified. The data were then categorised using axial coding, which were further refined as their properties and dimensions were developed with the students. Finally, selective coding was used to synthesise the findings in a substantive grounded theory.

Grounded theory is an appropriate method for developing research findings that project student voices back to their educators (Authors, 2021). The word "project" is chosen to capture how the grounded theory process can amplify the students' voices and encourage their educators to hear and act upon them. The iterative, progressive nature of building a grounded theory allowed the researcher to work together with students so that the theory is built together between the researcher and participants. The process is briefly exemplified by the following description of how the researcher worked with students to project their voices:

The students worked with the researcher to analyse the data. For example, the students and the researcher worked together to reach a key finding about how high expectations can be communicated through trusting relationships. The finding was developed when several students mentioned examples of how high teacher expectations were communicated during their interviews. The words of the students were used by the researcher to generate the initial codes of "freedom", or "independence". In this way, the students led the researcher to develop these initial open codes. The students then confirmed this initial coding during subsequent interviews, when the researcher showed them what they had said and asked if "freedom" or "independence" were appropriate labels for what they meant. This example of how the data were analysed together with students is further developed in the illustration below. NVivo was used to file the data that had been coded for future reference.

During the observations and interviews with the 10th student participant, "Jeremy", he was asked at the end of one school day about what had communicated his teachers' expectations during his classes. He offered the example: "…in Maths, basically teacher's expectation is if you know what you're doing just keep doing it. And then he's going to, he usually just helps the people that need more assistance, so it's independent, I reckon". The interview was transcribed, and when the data were analysed by the research team afterwards, the quote was tentatively assigned the open code

"independence". Other data coded under "independence" was examined in NVivo before returning to verify and collect more data with Jeremy the next day.

After watching more of Jeremy's classes and further interviewing, the researcher was able to confirm again that his Maths teacher communicated high expectations to him by allowing him to work independently. Jeremy verified that the label of "independence" was an accurate representation of how his teacher had communicated high expectations.

Further comparable data indicators were collected. For example, Sarah identified that her teacher had high expectations, and when asked how she knew, she explained: "She always does that she goes to every individual and asks like what do you want? Do you want to pass or do you want to get an A? …I feel more in control and I have choice". This data from Sarah was coded under "freedom", but it later became clear there was an axial code developing when this data was compared with other data collected. Two weeks later, the 13th participant elaborated on how he responded to his high teachers' expectations. He identified that his teacher communicated high expectations when she allowed him to work independently, explaining that:

> I like that – have a bit of freedom, just like, get it done, and he's not always over my shoulder like 'what are you doing, what are you doing' don't do this way, do it the way I get it and then he'll come and talk to me later…it allows me to choose my tempo and the way I do things. (Asher)

This interview data was transcribed, and these data were coded and verified with Asher as "freedom", but Jeremy and Asher had guided the researcher towards conceptualising how freedom and independence might be collapsed in a more theoretical code. Ultimately, the open codes of "independence" and "freedom" were abstracted together with the codes developed with other students of "trust", "self-direction", and "choice" to create the category of "teachers' respect for students". With other data indicators, this data was wrapped around the axis of "trusting relationships" as an emerging key category in students' experiences of high teacher expectations. Negative examples of students who experienced low expectations from teachers were also used to build the theory, but it is only within the scope of this paper to describe the students' experiences of high teacher expectations.

Data collection and analysis with subsequent students led to further abstraction where this category contributed to the *environment* category of the grounded theory, which is further elaborated below.

Four ways of communicating high expectations

Teachers communicated expectations to the students in this study four ways, relating to (1) confidence, (2) approach, (3) relationships, and (4) environment (CARE). These four ways of communicating expectations to students are elaborated below. Each of the four ways of communicating expectations was constructed together with the students, using the process of constant comparison, incremental data analysis, and constant verification that has been described above. The four constructs were used to build the grounded theory, which is presented in the discussion after illustrations of how each CARE construct was developed.

Confidence

The first way that teachers communicated high expectations to students was through students' perceptions of teachers displaying *confidence* that students can achieve highly (confidence). Students appraised their teachers as communicating high expectations for their learning when teachers interact with students in ways that enhance the students' belief in themselves as learners. Confidence was developed when students perceived that their teachers conveyed belief in the students' ability, which enhanced the students' own confidence in their ability to succeed academically. Communicating high expectations by conveying and building confidence was apparent when students perceived the teacher as respectful and supportive of the students. When teachers communicated a belief in the students' capacity to succeed at school that was seen as enduring and resistant to challenge, the students' academic self-belief increased so that they felt capable and were then willing to apply themselves fully.

The construct of confidence was developed as a category for the grounded theory with the students in this study, using data that included 26 instances from 20 interviews where students described experiencing high expectations by feeling "confident" or "proud". Negative cases were also apparent, where 13 instances from 11 interviews included students' feeling like they "can't do it" or reporting "lowered confidence". One student explained the difference in expectations where some "teachers make me feel capable and confident" versus those who make the student think "I can't do this. I don't know how to do this". High teacher expectations were experienced by students when their teachers expressed confidence in them by (1) encouraging them, (2) challenging them, and (3) expressing pride in their accomplishments.

Firstly, teachers conveyed high expectations to students by showing confidence in them through encouragement. The students were asked to give examples of when their teacher had communicated expectations in class that day, and they identified examples such as positive feedback:

> It's really good feedback. I respond well to feedback, and when she does stuff like that, it actually makes me feel really proud, because you're on the right track, you're going to do good. (Sarah).

Sarah's description captures the axial code of "encouragement", where students identified how high expectation teachers "notice us doing good" (Adam), and when teachers "encourage us, it makes me feel like I can do it. It makes me want to try" (Jaida). Teacher encouragement was experienced by students as instilling confidence in them that they could succeed academically. Brad reflected that when his teachers "… say like "I can see you can do it" and then I end up doing it. I think I do more work when they do that". Brad experienced increased confidence when his teacher encouraged him, which led to him doing more work to improve his academic outcomes. In this way, teacher expectation effects can occur through teacher encouragement, which conveys and instils confidence in students for improved academic outcomes.

Secondly, teachers communicated high expectations that conveyed and built confidence by challenging students. The students perceived that teachers did this by giving students opportunities to succeed at work they acknowledged as difficult. For example, Erin answered the interview question about how she responded to high teacher expectations by explaining that when teachers assign difficult work,

…it kind of makes you feel good, because I understand it, but it's tricky and new. It makes me feel happy. And good, because like, oh, I get it now, and it will be easier to do the other questions as well. (Erin)

Students like Erin experienced increased confidence that allowed them to approach further tasks with increased belief that they could succeed at learning. When their teachers conveyed confidence that students "could probably do it" (Jenny), the students were inspired to give their learning effort.

The third way teachers communicated high teacher expectations by conveying and building confidence was by expressing pride in students' academic accomplishments. For example, Rachel reflected: "He has high expectations, like he's pretty impressed with all of us. Like I think he is excited to see what we come up with". The students responded to teacher pride by also feeling proud of themselves. For example, when asked the interview question about when a teacher communicated high expectations, Sarah remembered her teachers' encouragement when "she was like Yes YES YES! and thrusting her arms.… when she does stuff like that, it actually makes me feel really proud, because you're on the right track, you're going to do good". Sarah's description of this interaction that had communicated high expectations reflects how the students responded to the teachers' pride with increased confidence. Confidence led to students like Sarah reflecting that they became empowered by their teachers' expectations to give their work more effort.

When students perceived that their teachers' communicated high expectations by conveying and building confidence, this led to students feeling more confident and doing better academically. For example, Araya answered the interview question about how she responded to her teachers' expectations by explaining that when.

…the teacher's proud of me, and that makes me feel good about myself. I get more confident and put up my hand. I also just sort of feel like maybe it's not a sort of hard as it would be before. (Araya)

Araya's reflection expresses the student response of becoming more confident as a result of the teachers' confidence in her, and the subsequent positive effect on the students' efforts and outcomes. When students felt confident that they would succeed at fulfilling the teacher expectations, they were more willing to engage in further challenges. They reflected that this improved their academic outcomes.

What the students in this study called "confidence" can be further understood through invoking a connection to enduring theory about student self-efficacy beliefs. Self-efficacy beliefs were first conceptualised by Albert Bandura in his enduring social cognitive theory (1977). Bandura's (1977) theory has endured over 50 years to inform more recent research about the impact students' self-efficacy beliefs can have on their academic outcomes (Honicke & Broadbent, 2016; Usher & Pajares, 2008). Bandura's theory is relevant here in terms of the effect that teachers' expectations of students can have on the students' confidence and achievement. Student self-efficacy belief is also a construct from educational psychology explaining student motivation through their perceptions of their capacity to execute the behaviours and organisation necessary to achieve educational success (Bandura, 1986; Zimmerman, 2000). Students' self-efficacy beliefs affect their attainment of academic outcomes at school because they shape the students' learning behaviours (Bandura, 1977; Pajares, 2008; Schunk, 2003).

Bandura explained that students construct their self-efficacy beliefs through four means: (1) mastery experiences, (2) vicarious social models, (3) verbal persuasion, and (4) physiological indicators. The students in this study identified how their teachers can communicate

high expectations through two of these means: mastery experiences and verbal persuasion, which built their confidence and improved their outcomes. Mastery learning experiences are effective at improving self-efficacy beliefs when they provide obstacles that make the task challenging, but achievable (Sewell & St George, 2009; Usher & Pajares, 2008). The findings from this study show that students experienced challenges which they feel they can overcome when their teacher gives them freedom to navigate learning tasks that they perceive as difficult, with the teacher making support available when needed. The students in this study also experienced effects from encouragement, a kind of verbal persuasion. Students might be convinced through suggestion or evaluative feedback that they are capable of achieving a certain task or outcome through direct, intentional persuasion (Bandura, 1977; Bong & Skaalvik, 2003). Oral persuasion includes messages or social expressions, such as positive encouragement from a teacher (Schunk & Pajares, 2002; Wilson et al., 2014).

Thus, the theoretical code of "confidence" makes a theoretical connection between teacher expectation effects and student self-efficacy beliefs by identifying *confidence* as the first means through which teachers' expectations were experienced by students. Students perceived positive teacher expectations effects on learning through teachers' expressing high expectations by conveying and building *confidence.* The students explained that this led to improved student self-efficacy beliefs. When teachers communicated high expectations through *confidence*, for example, by encouragement or mastery learning experiences, students responded by feeling more confident, encouraged, and proud in their learning. The students became more interested, involved, and motivated in their learning as a result, leading to their working harder to achieve challenging tasks and approaching learning with increased perseverance.

Approach

The second way that teachers communicated high expectation to students was through their teaching *approach.* High expectations were communicated to students when teachers conveyed a desire to use, and an understanding of, effective teaching approaches. Students appraised teachers as having high expectations when the teachers conveyed an understanding of how students learn and took the time to develop effective and memorable learning experiences. Teachers conveyed high expectations when they recognised students' active role in constructing knowledge rather than expecting them to learn passively through a traditional didactic approach (Duffy & Tobias, 2009; Green & Gredler, 2002). When teachers communicated an understanding of how students learn through their teaching approach, students appraised high teacher expectations and found it easier to learn. They become interested in their learning and motivated to want to learn, which they reflect leads to improved academic outcomes.

The students in the study explained that some teachers communicated high expectations by showing that they cared about students' learning. The students identified high expectations in teachers who "really want us to learn" invested in developing effective and memorable learning experiences. When the students were asked how high expectations were communicated during class, they identified a teaching approach where teachers developed constructivist learning tasks and used active learning to increase the students' understanding. Three categories of constructivist teaching strategies conveyed high teacher expectations through teaching approach*:* (1) active learning, (2) teaching for understanding, and (3) allowing students' choice and self-direction.

Firstly, high teacher expectations were communicated through giving students opportunities to engage in active, hands-on, learning experiences. When students were asked how teachers communicated high expectations that day, they brought up examples of teachers who gave them learning that was practical and relevant, which led to their being more able to focus on learning. Jaida explained that when given an opportunity to physically manipulate materials in a learning activity, it was "more fun and interesting… I was still learning but I actually got to do it, which is more appealing" (Jaida). The students responded negatively to teachers as the "sage on the stage" (Flynn, 2013). They appraised high expectations in teachers who were guides who sought to support them in building their own understandings (Brooks & Brooks, 1999; O'Donnell, 2012).

The second way that high teacher expectations were communicated through effective teaching approach was by teaching for understanding. Teachers conveyed belief in students by designing learning tasks that were constructivist and aimed to develop deep knowledge. One student responded to the interview question about how teachers communicated high expectations by commenting about a learning task that was designed in a way that showed that the teacher "wanted us to understand…(so) she made it relevant and engaging for us" (Lydia). Students responded to teachers' communicating high expectations through an effective teaching approach when "relevant" learning tasks made them want to "actually try" to learn. They reflected that this initiated a positive teacher expectation effect. For example, when Zane was asked about how he responded to an example of high teacher expectations communicated through and effective teaching approach, he explained that "you're actually interested in it and then you're like – oh I really do want to do this" (Zane).

The final way that high teacher expectations were communicated through an effective teaching approach was when students were given opportunities to be self-directed in their learning. The students appraised high teacher expectations in constructivist learning tasks where their teacher prepared them adequately, but they were expected to navigate their own complex learning tasks. For example, Asher explained how his teacher conveyed high expectations that empowered him to succeed when his teacher was "a guide and then he's pretty much left us alone…I enjoy it more. It's like, you're not given questions that you have to answer, you're sort of like creating what's happening" (Asher). The students were motivated to care about their learning when their teachers conveyed high expectations through an effective teaching approach by encouraging independence, which the students reflected led to them "trying harder" and to improved academic outcomes. When asked how she responded to a teacher she said had communicated high expectations this way, Nadia explained that.

> …he (the teacher) wouldn't have to tell me, I could just do it, and it would just come naturally, and I wouldn't have to put that extra effort in, like when he helped me with it. So, after that it just started increasing and my grades just kept getting higher. (Nadia).

The theoretical construct of "approach" invokes connections between teacher expectation effects and existing theory about how students learn. "Learning by doing" is a constructivist approach to learning first theorised by John Dewey (1916). Dewey argued that student experience precedes acquisition of new knowledge, so teachers are best to "give the pupils something to do, not something to learn" (p. 160). Dewey meant including chances to learn by physically manipulating materials, which led to the constructivist approach of experiential learning. High teacher expectations were experienced by the students in this study when the teachers conveyed concern with students' *understanding* in learning,

a focus that is characteristic of a constructivist approach to teaching (Brooks & Brooks, 1999; Duffy & Tobias, 2009).

Thus, the students' appraised teachers as having high expectations that positively influenced their academic outcomes when the teachers employed a constructivist approach to teaching that focuses on learners, not subjects. High expectations teachers were perceived by students as regarding knowledge as constructed through learning, which is experienced in a process where past experiences and pre-existing knowledge inform and influence the development of new knowledge (Kolb, 2014).

The theoretical construct of approach also explains how students respond and act when they perceive their teachers to have high expectations through their constructivist approach to teaching. Students were engaged and motivated when teachers adopted constructivist approaches including active learning, teaching for understanding, and encouraging students to be self-directed in their learning. The students' engagement and motivation led them to take actions that they reflected upon as allowing them to achieve higher academic results than achieved when teachers conveyed high expectations through approach.

Relationships

The third kind way that teachers conveyed high expectations was through *relationships*. Students experienced their teachers as having high expectations of them when teachers communicated investment in positive student–teacher relationships. Students recognised high expectations when they experienced teachers making them feel worthwhile by (1) listening to the students and (2) being "nice" to the students, which made the students want to (3) reciprocate the teachers' "niceness".

Firstly, high expectations were communicated when teachers listened to students because listening conveyed a desire to know and understand the students' needs, sending a message that the students were seen as having worth. The students experienced high teacher expectations when teachers listened and acknowledged students over the curriculum demands and pressures. When Hannah was asked when a teacher had communicated high expectations, she gave an example of a teacher "just asking if I was okay". Another student who was asked to identify high teacher expectations referred to an interaction when the teacher.

> ...came over and spoke to me, asking 'Is there a reason that you're not doing your work?' **That's what I really like** (students' emphasis) – she was checking in on me. She came over, crouched down, and spoke with me. *(Nadia)*

Nadia and Hannah's teachers sought to listen to understand why they were not engaged. The students recognised this as communicating high expectations. They reflected that they responded positively to teachers' efforts to understand their needs; for example, Abra was asked how she responded to an interaction where she identified that high expectations had been communicated this way and she reflected that "after, my mind is like – awake and refreshed. I just find it easier to like do the work".

The second way that teachers communicated high expectations through relationships was through what the students called "niceness". High teacher expectations were conveyed when teachers took time to relate with students in open dialogue, again giving students the message that they were seen as worthwhile. The students described instances where their teachers were "nice" and "extremely relatable" (Corey) as communicating high expectations for their learning. The students responded by wanting to reciprocate the teachers' "niceness" when the

teachers' prioritised care for the students in these "friendly interactions". The students felt more involved with their class and were more focused on their learning, which they reflected improved their academic outcomes. For example, Corey identified that his response to a teacher who conveyed high expectations through a positive student teacher interaction was that "I can do better in those classes where the teachers are more relatable".

Finally, teachers communicated high expectations through relationships by setting a caring example that made the students want to reciprocate with care for their learning. When they were asked how teachers had communicated high expectations, the students gave answers about when the teacher was "nice", and they had "built a relationship" (Jason). The students were asked about how they responded to this, and they explained by "actually wanting to do what (the teacher) says" (Araya). Teachers who communicated high expectations through relationships established a reciprocal empathy with the students, which motivated the students to become caring themselves. When the teachers set a caring example, students responded by feeling motivated to give their work "extra effort" (Rochelle).

These three ways that students perceived high teacher expectations through relationships can be further discussed through Noddings' (2015) enduring philosophical ethic of care. Existing theory about relational caring posits that teachers and students engage in mutual respect, where the students' expressed needs for well-being, the ones that they articulate, must be prioritised over the students' assumed needs, the ones that schools, curricula, or teachers may pre-suppose (Brownlee & Berthelsen, 2006; Noddings, 2012). The students in this study experienced high expectations being communicated by teachers that treated them with respect and invited them into reciprocal relationships by listening to them and taking time to build relationships with them (Koehn, 2012; Noddings, 2015).

Thus, the theoretical construct of "relationships" generated in this study links high teacher expectations with a relational aspect of teaching. Much research has identified student–teacher relationships as intrinsically connected with students' success at school (Cornelius-White, 2007; Hattie, 2008; Košir & Tement, 2014), including studies showing that positive relationships with teachers improve students' motivation, engagement, and academic outcomes (Krane et al., 2016; Martin & Dowson, 2009). However, the philosophical ethic of care provides a theoretical framework for understanding *why* relationships are important and how investing in relationships can communicate high expectations to students.

Environment

The final way of communicating high expectations to students in the grounded theory is through *environment.* High expectations were communicated to students when teachers established a learning environment that meets students' basic social needs. These teachers were identified as having high expectations by the students when they promoted students' success by ensuring that students experience competence, autonomy, and relatedness. These three needs echo the ways of communicating high expectations discussed above. They are also the three primary social needs identified in the enduring self-determination theory (SDT) (Deci & Ryan, 2008; Niemiec & Ryan, 2009).

The theoretical construct of "environment" explains that teachers convey high expectations through environment when students' needs are met within a positive classroom environment. These teachers were identified by students as having high expectations because of their "having backbone" and being "strict". The teachers communicated high expectations by showing respect for students, and were in turn respected by students.

For example, one teacher was described as having high expectations because "The students respect her boundaries and don't cross them. When she says something, the class listens. She is able to get people to do their work" (Zane). This concept of a teacher who gets students to listen, commands respect, and gets students engaged with their work can be discussed further through the theoretical framework of SDT.

Teachers also communicated high expectations to the students through the learning environment by giving students autonomy, developing reciprocal respect with students in a learning environment where students trusted and expected to be responsible. Asher explained that when his teacher communicated high expectations by giving him independence: "…knowing that he has that expectation, I like to hold that up". Eric also explained that when the teacher conveyed respect for him by trusting him, he wanted to be trustworthy. "I think that teacher can trust me and stuff like that. I don't know, it makes me want to work more and harder, to hold it up so he can give me more responsibility and stuff like that" (Eric). Eric's description captures how students' responses to *environment-based care* led to improved outcomes when they worked harder to show their teachers that they were responsible and trust-worthy.

The theoretical construct of "environment" connects teachers' communication of high expectations to students through environment with SDT. According to SDT, when the three basic social needs for autonomy, competence, and relatedness are met, people fulfil their natural tendency towards growth and mastery (Deci & Ryan, 2008; Neimiec & Ryan, 2009). SDT explains that social conditions that do not support students' learning also hamper students' psychological health and well-being, making them feel disengaged (Deci & Ryan, 2008; Standage et al., 2005). Research shows that the three needs are interrelated and function together under optimal conditions, so that when one need is met, it is likely that all three of the needs are met as well (Deci & Ryan, 2014; Standage et al., 2005). Thus, when teachers convey high expectations through confidence, approach, and relationships, it is likely that the teacher is also communicating high expectations through environment, too.

Discussion

Students experience high expectations from teachers through confidence, approach, relationships, and environment (CARE). These four constructs are outlined in Fig. 2 below, which synthesises the students' experiences of high teacher expectations through CARE.

The grounded theory provides a lens for interpretation of the process through which students experience teacher expectations effects, characterising four ways that teachers communicated high expectations to their students: confidence, approach, relationship, and environment. When students appraised high teacher expectations through these means, a positive
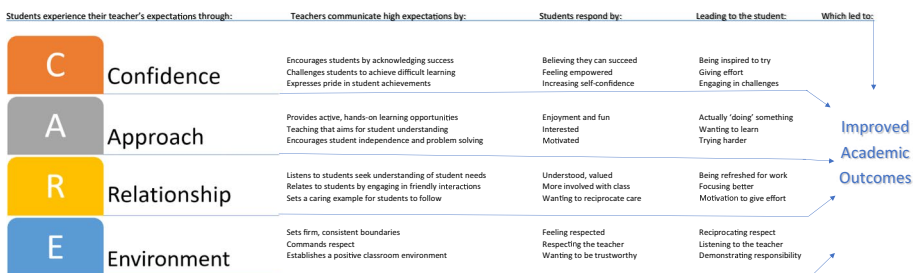

Students experience their teacher's expectations through:		Teachers communicate high expectations by:	Students respond by:	Leading to the student:	Which led to:
C	Confidence	Encourages students by acknowledging success Challenges students to achieve difficult learning Expresses pride in student achievements	Believing they can succeed Feeling empowered Increasing self-confidence	Being inspired to try Giving effort Engaging in challenges	
A	Approach	Provides active, hands-on learning opportunities Teaching that aims for student understanding Encourages student independence and problem solving	Enjoyment and fun Interested Motivated	Actually 'doing' something Wanting to learn Trying harder	Improved Academic Outcomes
R	Relationship	Listens to students seek understanding of student needs Relates to students by engaging in friendly interactions Sets a caring example for students to follow	Understood, valued More involved with class Wanting to reciprocate care	Being refreshed for work Focusing better Motivation to give effort	
E	Environment	Sets firm, consistent boundaries Commands respect Establishes a positive classroom environment	Feeling respected Respecting the teacher Wanting to be trustworthy	Reciprocating respect Listening to the teacher Demonstrating responsibility	

Fig. 2 The grounded theory: CARE

teacher expectation effect was initiated where students' motivation, engagement, and interest increased. They reflected that this led to a positive on their academic outcome.

The grounded theory generated by this research suggests that students' experiences of their teacher expectations can be interpreted through interactions involving confidence, approach, relationships, and environment. This represents a significant contribution to teachers' expectation research because the voices of secondary school students are added to the literature. The lenses of secondary school students have not been privileged in teacher expectations research before this study. The coding and categorising processes used to build this theory together with students provide original new knowledge that teachers might be able to use to convey high expectations for improved student achievement.

The theory that was generated by this study suggests that students experience high teacher expectations through classroom interactions where teachers build their confidence, use an effective teaching approach, invest in relationships, and create a needs-satisfying learning environment. Teachers might use this knowledge to adopt specific practices to convey high expectations in to their students. Existing research about teacher expectations has established that teachers communicate expectations to students through differential behaviours in the classroom (Bohlmann & Weinstein, 2013; Marshall & Weinstein, 1984), but the grounded theory generated here provides a framework for understanding how these practices impact on students from their perspectives: through the CARE practices.

The new knowledge presented in this paper also adds new high expectation practices to practices identified in prior research (Rubie-Davies, 2007; Weinstein, 2002). For example, teachers' using encouragement, providing mastery learning experiences, providing experiential learning experiences, listening to students, and investing in relationships with students are new CARE practices introduced by this research—ways that teachers convey high expectations for student learning. This knowledge adds new practices for communicating high expectations to the teacher expectations literature..

Furthermore, the students in this study gave explanations that provide new understandings about why and how certain teachers' practices communicate high expectations and positively affect student learning. Figure 2 depicts the responses students had to teachers' communication of high expectation and how this led to students' experiences of improved academic outcomes. Thus, the students' insights were used to build a theory that offers new understanding about the reasons why high expectation teaching practices work. For example, the theory generated explains that the students experienced high expectations when teachers used effective teaching approaches because they appraised the teachers as invested in teaching them so that they *understood* what they were learning. The students then responded by being more interested in learning and wanting to learn. The high expectations practice of teaching for understanding was experienced by students as having a positive effect on their learning. Further examples of practices that the students identified as communicating high expectation are illustrated in the second column of Fig. 2 above, with respective student response processes and outcomes in the last three columns. The arrows emphasise how this was experienced as a sequential process by the students.

Conclusion and limitations

Further research could explore the extent to which the substantive theory explains teacher expectation effects in other education contexts. The wider literature about students' perspectives and experiences of their teachers suggests the validity of this substantive theory and that it may be possible to triangulate the findings. For example, studies about

students' experiences of schooling in New Zealand and the USA have found that teachers' expectations are a key factor in their positive or negative experiences of education (Bishop & Berryman, 2006; Joseph et al., 2016). Other qualitative and mixed-methods studies about student experiences of "good" and "bad" teachers also find that secondary school students appraise their teachers based on their relationships with them, their care for them, and how "nice" they are (Egeberg & McConney, 2018; Krane et al., 2017; Strikwerda-Brown et al., 2008). These national and international studies show consistencies in students' emphasising that teachers are efficacious in positively influencing student educational outcomes through their kindness and caring relationships (Powell et al., 2018; Thornberg et al., 2020). The substantive theory generated by the research reported in this paper can be situated within this literature to suggest that "teacher expectations" play a part within the wider operating machine of students' experiences of teacher efficacy.

These possible applications and impact of the research are subject to limitations, many of which are inherent in grounded theory methodologies. The theory was co-constructed with students, so it includes "petite generalisations" about these students and their contexts (Stake, 1995). Some may criticise grounded theory because its methods are not suitable for wide generalisation (Chong & Yeo, 2015; Kolb, 2012). However, grounded theory is a research method that lays a foundation of particularisation—research that seeks to understand the experiences of a particular group of people (Stake, 1995). Such research is necessary to build new knowledge that compares how particular, contextual knowledge might be comparable or extendable to formal theory with "grand generalisations" (Corbin & Strauss, 2008; Stake, 1995). This study has connected the findings to broader literature so that they might be transferrable for a broad audience. The rich description of the findings using student words should promote readers' ability to make connections with their own contexts, which is the aim of qualitative research (Geertz, 1975).

Another potential limitation of grounded theory is that the quality of the findings can vary widely through more or less adherence to the methods, which are designed to limit the effect of researcher bias (Corbin & Strauss, 2008). The study described here rigorously adhered to Straussian grounded theory methods, as described in the 'Methods' section above and illustrated through the examples of the data analysis techniques supplied. Thus, researcher bias was minimised by following the methods described by Strauss and Corbin (2008) for focusing on what is in the data: (1) constantly asking "what is going on in the data" and "does what I think I see fit"—verifying analysis with participants; (2) being constantly sceptical of findings—everything is tentative until it fits; and (3) following the research procedures carefully because they are designed to minimise bias.

The grounded theory of CARE has implications for teachers. Teachers of the students in the population under study can consider their students words, and other teachers may also be able to transfer the knowledge to their contexts and adopt the suggested strategies that initiated positive teacher expectation effects. The strategies include interacting with students to convey high expectations that improve student outcomes through CARE: confidence, approach, relationships, and environment. Further research could explore the generalisability of these research findings to other contexts, which might lead to professional learning programmes for teachers. Policymakers could also use the grounded theory as a model for how students can experience their teachers' expectations, perhaps spurring further consideration of student voice in educational policy development. Future researchers might also consider the grounded theory in terms of how to work with students to construct theory together that gives students a voice in educational research.

Appendix 1

Interview Schedule

Before each interview, the following will be read to students:

"Before we start the interview, I want you to know that everything we talk about is confidential, but there are a few exceptions. If you tell me about anything involving harm to yourself or anyone else, I will report it to (the person identified by principal or the principal). The interview is about what your teachers expect of you, and we will discuss this with respect for your teachers at all times."

At the end of the first school day, students will be asked the following questions:

1. Do you think teachers expect all students to achieve at the same level? My research is about 'teachers' expectations of academic achievement' – what do you think that means?
2. How can you tell what your teacher expects from you, in terms of your academic achievement? Where do you think your teacher sees you in the future, and how can you tell?
3. Describe the expectations that your teachers have for you, academically.

At the end of the subsequent (4) observed school days, students will be asked the following questions. If they struggle to respond the questions with detail, the researcher may use the subpoints to prompt them for further detail. The subpoints draw on the shadow study observations, while still channelling student voice as much as possible by providing multiple examples for students to choose from:

1. What did your teachers say/do today that showed what they expect from you academically, as a student?

    a. "I noticed that……(give example of expectations interaction)…… and …(give another example of expectations interaction)……… Could you tell me more about that?
    b. What about when …….. or …….? What was that like for you?

2. How did you feel as a result?

    a. "I saw/heard you……… Am I correct? Why did you do that? What was that showing about your feelings?"
    b. "I noticed that you…….Is that right? Can you tell me more about that?"

3. What did you do in response? What will you do in the future?

    a. "I saw/heard you react by…….and…….. Is that correct? Can you tell me more about this response?"
    b. "I noticed that afterwards you……and……… Do you think this is right? What was that like?"
    c. "Will you continue to …… and …….?"

4. How will this affect your actions and future achievements at school?

    a. "If you continued to …… and ……, what would happen?"

Appendix 2

Table 1 Record of student observations and interviews

Student (pseudonym)	School	Observations	Interviews	Week observed and interviewed
1. Erin	A	10 (2×Cooking, 3×Maths, 3×Science)	5	30/7/18–3/8/18
2. Curt	B	7 (3×Maths, 4×Science)	4	6/8/18–10/8/18
3. Krissy	A	7 (1×Homeroom, 3×English, 3×Workplace Learning)	4	13/8/18–17/8/18
4. Adam	A	8 (1×Homeroom, 3×Maths, 2×Workplace learning, 2×Science)	4	20/8/18–24/8/18
5. Jessica	B	7(3×Science, 4×Maths)	4	27/8/18–31/8/18
6. Asher	B	5 (3×Science, 2×Maths)	4	3/9/18–7/9/18
7. Sarah	A	6 (3×English, 3×Science)	4	10/9/18–14/9/18
8. Jenny	B	6 (3×Maths, 3×Science)	4	17/9/18–21/9/18
9. Rochelle	B	6 (4×Science, 2×Maths; exams)	3	24/9/18–28/9/18
10. Jeremy	A	8 (3×Science, 3×Business, 2×Maths)	4	15/10/18–19/10/18
11. Zane	A	7 (3×Maths, 2×Science, 1×Business, 1×Homeroom)	5	22/10/18–26/10/18
12. Alyssa	A	5 (3×Media, 2×Humanities and Social Sciences (HASS))	5	29/10/18–2/11/18
13. Sam	B	6 (3×Maths, 3×Science)	4	5/11/18–9/11/18
14. Nadia	A	5 (2×English, 2×Maths, 1×HASS)	4	12/11/18–16/11/18
15. Jason	B	6 (3×Maths, 3×Science)	4	19/11/18–23/11/18
16. Ryan	B	6 (3×Maths, 3×Science)	4	26/11/18–30/11/18
17. Hana	A	4 (1×Homeroom, 1×Cooking, 2×English; poor attendance)	3	3/12/18–7/12/18

Table 1 (continued)

Student (pseudonym)	School	Observations	Interviews	Week observed and interviewed
18. Libby	C	10 total (1×HASS, 2×English, 2×Science, 2×Childcare, 2×Physical Education, 1×Dance)	4	29/4/19–3/5/19
19. Bob	C	10 (1×Physical Education, 2×Music, 1×Science, 1×HASS, 2×English, 3×Outdoor Education)	4	6/5/19–10/5/19
20. Jerome	C	10 (1×Physical Education, 1×HASS, 2×English, 3×Science, 2×Woodwork, 1×Maths)	5	13/5/19–17/10/19
21. Eddie	C	7 (2×English, 2×Outdoor Education, 1×HASS, 2×Maths)	4	20/5/19–24/5/19
22. Jaida	C	7 (3×Child Development, 2×Physical Education 2×other school specific)	4	27/4/19–31/5/19
23. Araya	C	8 (2×HASS, 2×Science, 4×English)	5	3/6/19–7/6/19
24. Corey	C	6 (1×other school specific, 3×HASS, 2×Science)	4	10/6/19–14/6/19
25. Penelope	C	8 (1×cooking, 2×sport, 2×science, 3×art)	3	17/6/19–21/6/19

Declarations

Conflict of interest The authors declare no competing interests.

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Current themes of research:

Teacher expectations, ability grouping, grounded theory, and student voice.

Most relevant publications in the field of Psychology of Education:

Johnston, O., Wildy, H., & Shand, J. (2022). 'That teacher really likes me'-Student-teacher interactions that initiate teacher expectation effects by developing caring relationships. *Learning and Instruction,* 101580. https://doi.org/10.1016/j.learninstruc.2022.101580.

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