The Australian Educational Researcher (2023) 50:921–940
https://doi.org/10.1007/s13384-022-00534-3

Teenagers learn through play too: communicating high expectations through a playful learning approach

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Received: 11 May 2021 / Accepted: 18 April 2022 / Published online: 25 May 2022

Abstract

Play-based learning is an approach used in early childhood education that is well supported by research on its varieties and effectiveness for young children's learning. Play-based learning meets the developmental needs of young children, but new research presented in this paper suggests that teenagers learn through play too. The experience of 25 Year 10 students in three Western Australian government schools was drawn upon to generate grounded theory about how students experience their teachers' expectations of them, which included findings that playful learning approaches communicated high teacher expectations. The students were shadow-studied in their classrooms and interviewed at the end of each day. Teachers were appraised as having high expectations when they included a playful learning approach, characterised as creative, exploratory, hands-on, fun and non-didactic. The students reflected that this led to increased motivation and academic success. A foundation for conceptualising play in teenagers' education is provided, suggesting how secondary school educators can harness play and communicate high expectations for learning through their pedagogical approach.

Keywords Secondary education · Adolescent learning · Teachers' expectations · Play-based learning · Playful learning · Constructivism

Is there a certain age where play stops? Perhaps the way that we play changes as we grow older, but most of us, as adults, engage in what we would call 'play' far less as the demands of mature-aged life burgeon upon us. However, people beyond childhood can benefit from being more playful in their approaches to teaching and learning (Brown, 2008; Zosh et al., 2017). Teenaged students, for example, are in limbo between childhood and adulthood, yet can experience advantages when their

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teachers incorporate playful learning experiences, too. The benefits of play for younger children's learning have been well established and extended to older primary school children and adult learning contexts (Lockwood & O'Connor, 2017; Tanis, 2012; Taylor & Boyer, 2020). Yet, there has been no research about the role of play in the learning of teenaged students beyond the scope of play in sport, theatre or game-based digital play (All et al., 2016; Kitchen, 2018; Pellas et al., 2019).

"Teenagers learn through play too" is a statement intended to invoke comparison with what we already know about the benefits of play-based learning as "fiercely championed" (McArdle et al., 2019, p. 166) in early childhood education (ECE) for improving student educational outcomes (Taylor & Boyer, 2020; Weisberg et al., 2015). What I call 'teenagers' in the title refers to the 25 secondary school students who participated in the study presented in this paper, who were 15–16 years of age. I also use the word 'teenagers' in reference to a broader group of secondary school-aged students from approximately 12–18 years old, grades 7–12 in Australia, that form a group distinct from 'early childhood-aged' or 'primary school-aged' children and adults. The existing literature, particularly the well-established evidence from ECE, can be drawn upon to conceptualise a place for 'playful learning' in secondary school education. Connections with adult education and the psychological construct of 'playfulness' can also be used as a foundation for new understandings about the place of play in approaches to learning within secondary schools (Lieberman, 1967; Lockwood & O'Connor, 2017).

The findings from the study presented in this paper show that teenagers value playful learning experiences. These findings are based on a study that aimed to generate theory to explain how Year 10 students experience their teachers' expectations of them. The teenagers appraised their teachers as having high expectations of them when they delivered lessons that included learning which the teenaged students experienced as 'play' and 'playful'. For these Year 10 students, 'play' and 'playful' learning captured an attitude and experience that was creative, exploratory, hands-on, fun and different from the usual. The students reflected that their learning improved when their teachers communicated high expectations by giving them playful learning opportunities, which they contrasted with more traditional didactic teaching approaches.

Conceptualising 'play'

Secondary educators do not often use the descriptive term 'play' in reference to teenaged students' learning. The social, psychological, cognitive, academic and emotional benefits of play have dominated the early childhood education (ECE) literature in terms of the approach of 'play-based learning' (Bubikova-Moan et al., 2019; Taylor & Boyer, 2020). The role of play and playfulness in learning has been extended to research about adult education (Brown, 2008; Tanis, 2012; Whitton, 2018), with developing theoretical foundations for play in adult education that draw on a more universal concept of play that is beneficial for learners of all ages, not just in the context of ECE (Mardell et al., 2019; National Institute for Play, 2014). However, there has been no research

about how play can be incorporated into pedagogy in secondary schools, except through game-based learning and in sport (All et al., 2016; Pellas et al., 2019).

Theory about the necessity of play in young children's education is well developed, with a basis including Piaget (1962) and Vygotsky's (1967) developmental theories of learning and play. Piaget (1962) articulated how children learn during different stages of actively exploring and problem-solving in their environments, a process which has since been described as 'play'. Vygotsky (1967) added that play facilitates development when young children engage in pretending and creating imaginary situations. Other theorists have conceptualised play as central to young children's learning, whereby play is an active pursuit that stems from children's natural curiosity and imagination (Erikson, 1977; Froebel, 1887). For some, play is in opposition with formal education because the functionality of structured learning compromises the freedom and choice inherent in true play (Huizinga, 2014; Singer, 2013). Some theories are specific to the play of young children and some are not, but very few theorists have conceptualised play in the context of secondary education classrooms (Lieberman, 1967; National Institute for Play, 2014).

Play is a massive concept, so while conceptualising, it is essential to explore pedagogical implications, it is also necessarily reductionist. Some scholars argue that 'play' is impossible to define adequately (Burghardt, 2005; Robinson et al., 2019). Understandings of play in the literature reflect discipline focusses, including the social play studied by sociologists, the cultural play studied by anthropologists and the playful learning studied by educators (Mardell et al., 2019; Tanis, 2012). 'Play' is best ascertained through a *feeling* and *attitude,* rather than any specific activity (Hakkarainen, 2006). Thus, this paper denies a rigid definition of 'play', instead acknowledging descriptors of play that are consistent across disciplines: Play is innate and primal, it is pleasurable, and it stems from curiosity and creativity (Crain, 2010; Mardell et al., 2019). Play involves a feeling of being 'playful', a state that is active, joyful and meaningful (Lockwood & O'Connor, 2017; Zosh et al., 2017).

Thus, for educators, 'playful learning' is when students develop new skills and knowledge while simultaneously experiencing the feeling and attitude of playfulness by being in a state of play. 'Play-based learning' is when the approach to learning is intentionally centred around the students' experience of play (Jay & Knaus, 2018; Pyle & Danniels, 2017). 'Play-based curriculum' is when play is integrated into academic programming and policy (Arthur et al., 2017; Harrison, 2019). Play is an experience that students at all ages can have, which educators can harness to enhance their learning (National Institute for Play, 2014; Zosh et al., 2017). However, the findings presented in this paper suggest that the methods for harnessing play for learning vary with the educational contexts and ages of the students. While maintaining some consistencies across learning contexts, *play* for the early childhood educator is also different from 'play' for the educator of older children, teenagers or adults (Tanis, 2012; Vygotsky, 1967).

Play in education

In the ECE context, play is acknowledged as necessary for the healthy cognitive development of young children, which occurs rapidly during their years in ECE (Vygotsky, 1967). Recent conceptualisations of 'play' from the literature reflect the sanctity of play for young children, the need to resist the 'push-down' of academic demands from older age groups to the ECE curriculum (Bubikova-Moan et al., 2019; Carmondy, 2018; Nicolopoulou, 2010). 'Free play' is child-directed, voluntary and flexible, and this type of play is fiercely protected by its advocates in the ECE (Hoskins & Smedley, 2019; Pyle & Danniels, 2017). However, Australian research and policy suggest that play in ECE can also include that which is guided by adults through the creation of learning environments where children use problem-solving and exploration to learn (Department of Education Employment and Workplace Relations (DEEWR), 2009; Pyle & Alaca, 2018). Adults leading children during play is contentious for educators because the imagination and spontaneity of free play are central to young children's' development (Bruce, 2012; Hirsh-Pasek & Golinkoff, 2008). The Early Years Framework (2009) in Australia acknowledges that young children have a right to play, defining play as "a context for learning" that promotes well-being and relationships, where children express individuality, develop curiosity, and make connections with their existing knowledge (p. 10). Conceptualising play for ECE thus involves a spectrum from pure free play to guided play (Jay & Knaus, 2018; Miller & Almon, 2009; Pyle & Danniels, 2017).

As children become older, play becomes less emphasised as a developmental cornerstone than it is during the ECE years, but play can still have benefits for learning (Jay & Knaus, 2018; National Institute for Play, 2014). Play becomes internalised as children age, while the rules involved in external play become increasingly explicit (Vygotsky, 1967). School becomes more structured, formalised and bound to the achievement of academic outcomes as children progress through the primary years in Australia (Authority, 2021; Carmondy, 2018). However, some researchers have argued that play-based approaches to achieving curriculum outcomes can be sustained and are not necessarily incompatible with rigorous standards for achievement (Miller & Almon, 2009; Pyle & Danniels, 2017). The role of the teacher in the later primary years is to lead and guide students through play-based learning that is designed to achieve curriculum outcomes (Jay & Knaus, 2018). Theorists increasingly accept that play for older children is not necessarily frivolous, nor completely student-directed or freely chosen, but can also be led by the adult/teacher (Mardell et al., 2019; Pyle & Danniels, 2017).

Beyond childhood, there has been very little research about play and playful learning in the context of teenagers and secondary education (Kitchen, 2018). The existing research about teenagers engaging in play in education has been specific to drama and theatre, sport or digital game-based learning (Hainey et al., 2016; Kitchen, 2018). However, some research has been conducted showing that play is beneficial for the learning of adults (Lockwood & O'Connor, 2017; Tanis, 2012). In workplace and higher education settings, adults report that play

can enhance their learning outcomes while making the process of learning more enjoyable (Brown, 2008; Tanis, 2012). Play and playfulness have been found to improve student performance in the context of higher education and are associated with increased creativity and innovation in the workplace (Bateson & Nettle, 2014; Proyer, 2011). These benefits for adults continue to be explored, but research about the play in education for secondary school is scant.

The research presented here addresses the leap in research about the efficacy of play pedagogy in improving student learning from children to adults, where teenagers have been neglected. The findings add to existing work about the role of play in secondary education that has been specific to drama and theatre (Kitchen, 2018), suggesting that secondary school teachers across subject areas can incorporate playful learning opportunities to engage and motivate their students to learn.

Play and playfulness in teenagers

Very little research about play or playfulness in teenagers' education has been conducted (Kitchen, 2018; Lieberman, 1967), but there has been some theorisation about what 'playfulness' means in the context of this age group. Outside of education, there is evidence that teenagers can experience benefits of being playful including improved psychological well-being (Staempfli, 2007).

Evidence from psychology has stipulated that people can feel 'playful' at any age, but the way that playfulness is expressed is different according to life stage (Yarnal & Qian, 2011). Playfulness has been conceptualised in psychology as a personality disposition, with findings that it is related to life enjoyment, well-being and coping with stress at school (Lieberman, 1967; Staempfli, 2007). Scales for measuring playfulness specific to adolescents have been developed, including items that measure the teenagers' self-assessed ability to engage in imaginative and flexible encounters with reality (Staempfli, 2007). Such scales are based on the historical work of Lieberman (1967), a psychologist who theorised that in the context of adolescence, the trait of playfulness involves "as if" thinking and "toying with ideas and concepts as well as seeing remote connections" (p. 2). Lieberman's research posited that playfulness could be utilised by teachers in the classroom to include "spontaneity" and "fun" in teenagers' educational process. She established a measurable construct of playfulness specific for adolescent students that was notably different from that used in the ECE context by observing 17 secondary school classes and 300 students. According to this research, a playful adolescent showed physical mobility, physical alertness, enthusiasm, spontaneity and joy, friendly wit, group orientation, friendliness, intellectual curiosity, achievement orientation and attractiveness (Lieberman, 1967). However, playfulness in adolescence was conceptualised as a personality trait with stable characteristics, rather than a state that could be brought about through pedagogy.

Such research from psychology about playfulness as personality trait may be useful for developing new theory about the role of play in the context of secondary education. Yet, playfulness as a personality trait is different from playfulness as a learning behaviour. The conceptual differences between the playful learning

of young children and the playful learning of teenagers do not yet have a theoretical basis specific for the context of secondary education. The findings presented in this paper provide some initial qualitative evidence that begins to establish a foundation for understanding teenagers' experiences of engaging in playful learning experiences. The research also connects theory about playful learning to the well-established literature about teacher expectations, which continue to show that students' academic outcomes improve when teachers have high expectations for learning (Papageorge et al., 2020; Timmermans et al., 2018). The teenagers in this study experienced high teacher expectations through teachers' provision of opportunities to engage in playful learning.

Literature about teachers' expectations

The findings about teenagers learning through play discussed in this paper were developed in a larger study about how Year 10 students experience their teachers' expectations of them. Since the foundational Pygmalion study (Rosenthal & Jacobsen,1968), thousands of studies have confirmed that teachers' expectations can affect students' academic results (Papageorge et al., 2020). My study of the literature synthesises the research about teachers' expectation into four main points (Johnston et al., 2019), which are briefly overviewed below:

(1) Teachers' expectations can affect students' academic outcomes (Papageorge et al., 2020). Reviews of the literature continue to find that teacher expectation effects can explain anywhere from 3 to 60% of variation in student achievement (Hattie, 2012; Jussim, 2017; Jussim & Harber, 2005; Rubie-Davies, 2014).
(2) Student characteristics inform teacher expectations. Some of the characteristics that can inform teachers' expectations of students include prior achievement (Rist, 2000), socio-economic status (Rubie-Davies et al., 2006), ethnicity (Chen, 2020; Tenenbaum & Ruck, 2007), effort (Helwig et al., 2001) and gender (Dusek & Joseph, 1983; Van Duzer, 2006).
(3) Some students are more affected than others. Students coming from disadvantaged backgrounds including minority ethnic groups (Jamil, 2013; Liou & Rojas, 2016; Rubie-Davies & Peterson, 2016) and students from low socio-economic backgrounds (Alvidrez & Weinstein, 1999; Mistry et al., 2009) tend to have more pronounced teacher expectation effects.
(4) Students experience effects through teachers' differential treatment. The more differently a teacher treats students in the class, the greater the expectation effect on the students that he/she teaches (Kuklinski & Weinstein, 2001). High expectancy teachers offer students choices, use a facilitative approach, give all students the same opportunities to learn, continually monitor students' progress and encourage student autonomy (Bohlmann & Weinstein, 2013; Rubie-Davies, 2007; Rubie-Davies et al., 2007; Weinstein, 2002).

Despite the breadth of research, little qualitative research has considered how students are affected by their teachers' expectations, from their points of view. Students can be astute observers of their teachers' expectations of them (Le, 2014; Wong, 2014). Little research richly describes students' experiences of their teachers' expectations from their point of view. One notable exception is Rhona Weinstein's (2002) seminal study reported upon in her book entitled *Reaching Higher: The Power of Expectations in Schooling* where Weinstein reports qualitatively how primary school students experienced their teachers' communication of expectations through differential treatment in the classroom. Since Weinstein's work, very little research has considered how students experience their teachers' expectations from their points of view.

The research presented in this paper aimed to address the need for further research that explores students' experiences of their teachers' expectations of them. The findings explain *how* students were affected by their teachers' expectations from their points of view, which included the findings about playful learning presented in this paper that were a part of this larger study. When the students were asked, for example, "How did your teacher communicate high expectations to you?" during interviews, they recalled instances where play-based approaches to learning had been used. The students explained how high teacher expectations were communicated by teachers who gave students playful learning opportunities.

Research approach and methods

The study was conducted using a classic grounded theory approach (Corbin & Strauss, 2008; Glaser & Strauss, 2017), which is based upon the theoretical framework of symbolic interactionism (Blumer, 1969; Carter & Fuller, 2016). A qualitative, interpretive research design was selected because the study aimed to develop new substantive theory about how students experience their perceived teachers' expectations of them (Punch, 2014). The main research question was *How do students experience their perceived teachers' expectations of them?*

A conceptual framework for the research was also developed. Three layers were embedded in the conceptual framework to represent three elements that informed it. Firstly, Blumer's (1969) theory of symbolic interactionism was represented in terms of the students' experience of meaning construction, action and result. Secondly, the classic grounded theory was represented by the coding paradigm (Strauss, 1990) of conditions, actions/interactions, strategies and tactics and consequences. Thirdly, a synthesis of the literature was represented by the final layer in the framework, where students experience their teachers' expectations by seeing what their teachers say and do, react and then respond, including the consequences this has on their academic achievement (Johnston et al., 2019). The conceptual framework was used to develop a semi-structured interview schedule for use with student participants, including questions such as "Can you tell me what your teacher expects from you, in terms of your academic achievement?" and "What did you teachers say/do today that showed what they expected from you academically, as a student?"

The responses the students gave to these questions were used to synthesise the findings about how they experienced high teacher expectations when teachers gave them opportunities to learn playfully.

The grounded theory was constructed iteratively by working with 25 Year 10 students across three Perth Metropolitan public secondary schools in Western Australia. The schools were selected based on their demographics as likely to contain students from mid-low socio-economic backgrounds and minority backgrounds. Previous research has shown that students from minority backgrounds and low socio-economic backgrounds can experience more effects of their teachers' expectations than their more privileged counterparts (de Boer et al., 2010; Rubie-Davies, 2014), so schools that would be most likely to include students who were experiencing the effects of their teachers' expectations were recruited.

Ethics approval was gained from the University of (The University of Western Australia) (RA/4/1/9242) and the Department of Education – Western Australia before any schools or students were invited to participate. All school principals, parents, teachers and students involved received participant information letters to consider whether they wanted to participate, before signing a consent form. Participant information letters and consent forms were initially distributed to teachers and students via a school representative nominated by the school principal, but I (the researcher) had established presence within the school; therefore, the principals and teachers gave me permission to recruit participants myself. Students were recruited selectively based on my classroom observations and recommendations from their peers and teachers. Participants who were affected by their teachers' expectations of them were sought out, based on wide variance in grades and conduct between classes.

A total of 25 students and 34 teachers participated in the study at three schools. Data were collected through shadow-study observation of the students in their classes, where a note-taking framework adapted from the Classroom Ability-based Practices Checklist was used (Bohlmann & Weinstein, 2013), and the Teacher Treatment Inventory (Weinstein et al., 1982). The note-taking framework listed the student–teacher interactions that previous research has found communicate teachers' expectations to students, but did not include anything about 'play' or 'playful learning' specifically. A total of 175 classroom observations were completed over 25 weeks of school. Each student was followed through their school day to their classes with consenting teachers over the course of one week and was interviewed at the end of each school day, with 100 total interviews conducted. The findings about how high expectations were communicated through playful learning opportunities gradually emerged as the research progressed.

In-depth interviews with students elicited conversations about how they experienced their teachers' expectations of them (Punch, 2014), including through pedagogical approaches that incorporated play. Each student was interviewed four or five times, so we were able to revisit topics of interest to the development of the theory. The students guided the development of the final grounded theory, verifying previous findings, providing negative cases and elaborating on significant aspects of the theory as it was constructed. We built the theory together to give the students a voice about how they were affected by their teachers' expectations of them. A more

detailed account of the process used to construct the theory to project the students' voices is available in another paper by the authors (Johnston et al., 2020).

The data were analysed using the grounded theory methods of open coding, axial coding and selective coding to progressively develop the theory with the students, including the importance of playful learning approaches (Corbin & Strauss, 2008). Data were always analysed before returning to the field the next day for further collection so that the constant verification and comparison of the developing codes and categories could inform the theory's construction (Glaser, 2012; Glaser & Strauss, 2017). Each student was recruited after each round of data collection (1 week) when the previous student had been completed, until saturation of the theory was reached with the 23rd participant and confirmed with the final two participants. Thus, the substantive theory of 'students reconciling with their teachers' expectations of them' was complete. The findings about students' experiences of playful learning are a part of that theory, suggesting new ways of conceptualising playfulness in the context of teenagers' education. The findings can be applied to develop teaching approaches that could improve students' learning outcomes.

Findings: teenagers' playful learning

The students in this study commented that high teacher expectations were communicated when their teachers took an approach that students described as playful. Several of the students used the words 'play' or 'playful' to describe a classroom interaction where the teacher had communicated high academic expectations. Play and playful learning had the characteristics of being experienced as creative, exploratory, hands-on, fun and different from the didactic approaches that the students had experienced. When teachers used an approach to learning that included these elements of play and being playful, the students responded with increased engagement and motivation. They also felt that they were able to remember and understand more about their learning, which they reflected improved their academic outcomes.

The students described some specific approaches to teaching that they experienced as opportunities to learn playfully. For example, when 'Jaida' was asked about a time that she had experienced high teacher expectations, she described a classroom interaction where she responded by feeling "like a little child (laughing)". She elaborated that this was during a class activity that she described as "playful" and "fun". The activity, which had also been witnessed by the researcher during a classroom observation that day, was in her Childcare class, where she was learning about birth. She explained that the teacher…

> …wants us to understand how much you dilate when giving birth, and she wants us to understand all the different things about giving birth. The ping pong ball and the balloon, showing how it starts of closed and then starts to open more, was kind of cool. There was a ping pong ball in the balloon and I had to pull the open part of the balloon to make the ball stick into it, and then I had to push from the top to make it come out. I didn't think it would be that hard! (laughs) I got a boy.

Jaida described this interaction to explain that she experienced it as an effective teaching approach that had communicated high expectations. The teacher incorporated a learning design that Jaida experienced as play. Jaida elaborated on her response to engaging in this playful learning experience and why it was effective for learning:

> I'm like a little child (laughs). Hands on. I find it more like, appealing, it's more interesting, because it's not just sitting there, writing in a book, writing notes off the board. You're actually doing it. You're still learning the same thing, it's just a different way of teaching it. You still just do it, but it's a bit more fun, a bit more laughing. I'm interested when it's more fun, I remember it more. Because I got to touch it, I got to actually try to push the ping pong ball out of the balloon, so I'm going to remember, aw- that's how it happened! That's how the baby would come out.

This description of engaging in play captures the opposition between traditional approaches to formal education and playful learning originally described by some theorists (Huizinga, 2014), while also highlighting how play and learning can be complimentary. Jaida experienced this style of learning as "different" from didactic styles of teaching and she responded by experiencing "play", "fun" and "laughter". Furthermore, she described that this way of learning was more effective for her engagement and retention of the knowledge the teacher expected her to "understand". Jaida experienced this as an example of a teacher communicating high expectations for learning.

Another example of a learning experience that was described by students as "play" was a Science task where they were given several weeks to learn about Physics by building a roller coaster. These lessons were observed by the researcher, and several of the Year 10 students described the task as communicating high expectations because of the effective approach to teaching. What made the approach effective, according to the students, was its playfulness. Jenna explained that the teacher was expecting them to "find out" about "kinetic energy and the velocity and all of these different things" by "being able to play around with them a bit". The students reiterated that playful learning was different from the usual. Asher reflected that "… it's different, our rollercoaster. Like, it's…different. We have a guide and he's pretty much left us alone. Like, here's your template of how you do it, you need to hand it in on these dates, go!" For these students, being able to build a roller coaster to learn Physics was playful because they were able to engage in a different way of learning that was exploratory and independent. Jessica summarised that playful learning is "fun" and "different", where the teacher "expects us to have fun and maybe do something new, learning something new". The students experienced this as communicating high expectations and leading to better learning outcomes.

Further data from interviews with the students reinforced the notion that high expectations were communicated by teachers that designed effective learning experiences by incorporating opportunities for students to be playful. The students described how playful learning was different and more effective than the didactic teaching approaches that they had experienced. Learning was experienced as playful when the students "get to do stuff, rather than just sitting down and listening

to the teacher" (Sarah). This difference was echoed by other students, including Rochelle, who contrasted the roller coaster task with a teacher who used a didactic "question, answer, go" approach. She described that the roller coaster task was effective because students were "up running it ourselves. It's not like, copy off the board. We're actually making something and using our imagination". The students' contrasts between didactic and playful approaches highlight students' experiences of playful learning as more effective because it is different and more hands-on than didactic approaches.

The students' words also capture how playful learning approaches allowed them to be independent and imaginative. Rochelle's use of the word "imagination" when describing her experience of building the roller coaster captures how playful learning was experienced as creative by the students in this study. Rochelle also explained that the teacher was "excited to see what they came up with". Asher reflected that the reasons the roller coaster task was effective was because it he was able to "create what was happening" and Ryan described how when he was building the roller coaster, he was "in my own little world". Thus, playful learning opportunities were experienced by the students as creative: encouraging them to use their imaginations.

When students experienced high teacher expectations through learning tasks that were playful, they also described their teachers' intention in terms of understanding. For example, Jaida explained that the ping pong ball in the balloon was intended to facilitate students' "understanding" of childbirth. Sarah explained that an approach where she was given the opportunity to be creative was intended to get her to "really understand the differences between stereotypes". These descriptions of playful learning experiences were consistently in terms of the teachers' expectations that students would "learn and understand" (Jason) and "achieve and understand the concept of what we are learning" (Eric). This finding stood in opposition to the students' reflections on teachers' didactic approaches where the students' experience was the teachers' expectations were to complete work and "at least try" (Penelope), rather than "really understand" (Sarah).

When students experienced less playful, more didactic, approaches to learning, they described the teachers' expectations in terms of completing work rather than understanding concepts. Students were asked about how they experienced their teachers' expectations of them when the teachers took approaches to teaching that relied upon listening, copying notes and completing worksheets. Their responses were that the teachers expected them to "do their work" (Abra, Alysha, Adam, Curt), "get it done" (Alysha, Adam) or "finish this amount of work in this lesson" (Krissy). The students did not experience teachers' expectations for deep understanding of content when the approach was didactic. For example, Jenna explained that when a teacher gave a worksheet, "she expected us to do a lot because there was so much on that sheet that she wanted us to get through". Rochelle described a teachers' expectations similarly when the teacher "gave us a revision book and expected us to just do it". These descriptions stood in contrast with the students' descriptions of playful learning where the teachers expected understanding.

Students also experienced less engagement and motivation when teachers used didactic teaching than when teachers used a playful approach. Didactic approaches students described as ineffective included teachers' expecting students to learn by

listening and writing notes. For example, Libby explained that she lost interest when she was expected to learn by copying information from slides:

> I have to remember it. The remembering is too hard…I'm like, I can't remember ALL (students' emphasis) of that! I don't like it. If I find it somewhat interesting, I'll focus on it, but if I don't find it interesting, I'll just like read it over and not take it in.

Libby's quote reflects her experience that a didactic teaching approach did not promote retention or understanding. This reflects a stark contrast with the experiences of playful learning had by Jaida and Asher who responded with increased ability to retain information and "remember it more" (Jaida). Jerome also did not respond well to having to do "like 3 or 4 pages of just writing and writing…it's not the best way. It's not really pushing me". In this study, regardless of the subject or context of teaching, the students did not experience didactic teaching as effective and saw it as communicating low teacher expectations. The students experienced the more playful learning experiences as meaningful because they promoted understanding and learning, which was not the case with traditional didactic approaches to teaching.

Thus, the students experienced improved learning outcomes when their teachers communicated high expectations by giving them opportunities to engage in playful learning. They explained that they were more motivated and engaged in their learning when they experienced playful learning, rather than didactic teaching, which they explained led to deeper understandings. Furthermore, many of them explicitly reflected on improved grades when they were asked about how this affected their learning outcomes. For example, Libby reflected that she could "do better" in classes where she is engaged in playful learning. Asher explained how he could "get a good result" in classes with playful learning, and Rochelle echoed that she "learned more". Although the examples the students provided were context-bound and subject-specific, the themes about the qualities and benefits of playful learning were consistent across contexts and subjects.

The themes from the data about the students' experiences of playful learning reflect their enthusiasm for an educational approach that they found motivating, engaging and effective. Their teachers communicated high expectations when they gave the students opportunities to playfully learn. Playful and play in learning were experienced by the students when the teaching was different from traditional didactic styles, using more hands-on approaches and allowing students to lead exploration with independence, creativity and fun. Students' experiences of playful learning were that it promoted meaningful learning and deep understanding, which they reflected improved their academic outcomes.

Discussion

This paper offers new understanding of the role of play in teenagers' learning. The students' reflections on ways of learning that they considered 'play' and 'playful' suggest a place for playful learning in secondary schools. The characteristics of

playful learning described by the students included how they are different from the traditional approaches to learning in their education because playful learning is creative, hands-on, exploratory and fun. Furthermore, the students experienced playful learning opportunities as engaging, motivating and conducive to better learning outcomes. They experienced deeper learning and improved grades when their teachers communicated high expectations by giving them opportunities to engage in playful learning. These findings offer a foundation for new theory about how playful learning can be adopted as a teaching approach that communicates high expectations for academic achievement to students.

Conceptualising play-based learning in education currently relies on perspectives from the ECE literature, but this paper suggests an age-specific way of conceptualising play for teenagers. The findings outline teenagers' experiences of 'playful learning' and the accompanying states of motivation, engagement and increased understanding. The teenaged students who participated in this study experienced play as an effective way of learning. Finnish policy stipulates that "play is rather an *attitude* than an activity of a certain kind" (Hakkarainen, 2006, p. 185), suggesting that determining what is 'play' and what is 'not play' rests with the person who is or is not experiencing play. Play can thus be conceptualised as a productive attitude towards learning—an active state that can be harnessed in the education of teenagers too. Developing pedagogy that encourages playful learning for teenagers could improve their academic results, as was the experience for the students in this study.

Principles for pedagogy that incorporates play into learning from the ECE context can be applied to the findings of this research about the secondary school context. The teenagers in this study conceptualised play in learning as involving more student-centredness than traditional didactic teaching approaches, but their play still followed the guidance of teachers within a structured environment. Guided play is conceptualised in ECE as on the opposite end of the 'play-spectrum' to free play, which is child-directed and spontaneous rather than adult-guided (Pyle & Alaca, 2018; Taylor & Boyer, 2020). The teenagers might have conceptualised play in the context of learning as more rule-bound because their awareness of the role of restraint in play was further developed as they cognitively matured (Vygotsky, 1967). As teenaged students, they developed greater insight into their learning than early childhood students. The teenaged students thus supported an attitude of 'playful learning' where the role of the teacher as director of the playful learning experience was acknowledged (Pyle & Danniels, 2017), but the learning was more student-centred than the more traditional didactic styles of teaching that the teenagers had experienced. Jaida summarised the contrast by explaining that her playful learning experience had followed from "a different way of teaching". Further research could explore the notion that external restrictions and adult guidance is more acceptable as a feature of play for teenagers than it is for young children.

Thus, teachers of teenagers can also construct playful learning experiences which can communicate high expectations and improve learning outcomes. The study presented in this paper included findings that when teenaged students were given opportunities to learn through playful experiences, they experienced high teacher expectations for their learning. The findings introduce new knowledge about how teenagers learn through play that could be developed into more formal theory and pedagogy

with further research (Glaser & Strauss, 2017). In ECE theory, child development psychologists such as Piaget and Vygotsky established knowledge that has been used as a foundation for ideas about the centrality of play for young children. For teenagers, what the students described as'play' and 'playful' could be further connected to the notion of 'play-based learning' from the ECE literature through enduring constructivist theories of education (Dewey, 1916; Piaget, 2013; Taylor & Boyer, 2020). These approaches to learning are well established in improving learning outcomes and could further inform development of new pedagogies for including play in teenagers' learning.

Piaget's work (1962) is also often referred to as a philosophical foundation for a play-based approach in ECE, with his developmental stages cited as framework for students to move through by exploring and discovering the characteristics of their world through play. However, Piaget's (1962) developmental stages extend to secondary education—he described how teenagers at ages 12 to 16 are still moving towards the formal operations stage. Much research has verified the sequential cognitive development of teenagers through the Piagetian stages, with acknowledgement that the transition between stages can vary significantly (Shayer, 2003). Not all adolescents at age 15, for example, will have reached the formal operations stage. The students in my study were 15 or 16 years old when they participated, and the narratives reflect how they experienced exploring their world through playful experiences as effective for learning which they found engaging and easier to do. This led to their reporting increased academic achievement when they were given opportunities to learn playfully. These playful learning experiences might facilitate students' cognitive development as they move into Piaget's formal operations stage. The evolution to Piaget's final stage is a process which is facilitated by the explorative and creative features of their playful learning (Piaget, 1962). The students experienced constructivist learning tasks as reflective of a teacher who communicated high expectations by understanding how they learn. They had deeper understandings and self-reported better grades with playful learning experiences.

Theory about pedagogies of play in the education of older children might also draw on other constructivist theories about education, such as that of John Dewey (1916). Dewey's notion of 'learning by doing' and experiential learning was echoed by the students in their descriptions of playful learning experiences as hands-on and exploratory. Dewey (1916) argued that students should be engaged in learning about the real world in a practical way for their learning to be meaningful. He emphasised the importance of experience in learning where the students are "given something to do, not something to learn" (Dewey, 1916, p. 160). This includes giving the students physical materials to manipulate and explore to create first-hand learning experiences, a premise common in play-based learning. Further research and theorisation about playful learning in the context of secondary schools could draw on this study and seminal ideas from both Dewey and Piaget to continue to explore how playful learning can be designed and why it is beneficial for teenagers' education too. Such research and theory could include the role of playful learning in communicating high teacher expectations to students.

The examples of playful learning experiences presented in this study were abstracted from the data across all 13 secondary subjects that were observed,

suggesting that playful learning approaches can be adopted by teachers in all of the various subject areas. While the examples provided were context-bound and subject-specific, the findings drawn from them were true across the three schools and all 13 of the learning areas that were observed to generate these data. The learning was considered playful when the teacher constructed a learning environment where the student was able to have control over their learning. The students emphasised that they experienced effective learning when "I am actually doing something", responding by being "more interested when the learning is hands-on". The playful, hands-on, exploratory and creative learning experiences led to the students responding by being "curious and excited", because they "got to get up close and personal". They felt more motivated and "wanted to learn and wanted to do it". The students were reflecting on their experiences of effective teaching through teachers' provision of playful learning opportunities, where the teenagers could control their environment for learning in a hands-on experience. They experienced these benefits when they could learn by exploring and independent problem-solving through trial and error.

While novel in explicit application to secondary education, policy in Australia has required play in the ECE setting. The National Quality Standards are implemented through the Early Years Learning Framework, which has resulted in more Australian educators including play-based learning in their approaches to teaching (Jay & Knaus, 2018; Sumsion et al., 2014). Internationally, play-based learning also features prominently in policy intended to shape pedagogy in ECE (OECD, 2019). However, for secondary educators, little policy dictates successful pedagogical approaches for teaching secondary school students. There are a few state policies in Australia with pedagogical recommendations that apply to secondary school students, but none of these mention playfulness, play or play-based learning (Government of South Australia Department for Edcuation & Child Development, 2021; Victoria State Government Education & Training, 2020). Furthermore, none of these policies about pedagogy mention any of the attributes of playful learning described by the teenagers in this study, including how it is creative, experiential, imaginative, hands-on and different. While policy about age-based pedagogy including play for Early Childhood Students abounds (Department of Education Employment and Workplace Relations (DEEWR), 2009; Queensland Government Early Childhood Education & Care, 2020), recommendations about playful approaches to teaching, or any characteristics thereof, are absent from policy about teenagers' education (Government of South Australia Department for Edcuation & Child Development, 2021).

The findings presented in this paper suggest that playful approaches to teaching to learning can benefit teenaged students in secondary schools too. The students explained that when their teachers gave them opportunities to learn through playful experiences, they became more engaged with their learning and their educational outcomes were improved. Playful approaches to learning communicated high teacher expectations for their learning. The Mpartwe Declaration (2019) prioritises the cultivation of critical and creative thinking in all students including secondary students. Creativity in adults and younger students has been established in research as cultivated through engagement in play and being playful (Bateson & Nettle, 2014;

Zosh et al., 2017), and the teenaged students in this study also identified creativity as a characteristic of playful learning. They used words like 'creativity' and 'imagination' to describe the benefits they experienced when their teachers used a playful approach to learning, suggesting their experience of playful learning as promoting their creativity.

Thus, this research contributes a new explicit connection to the inclusion of 'play' in learning and pedagogy from ECE to secondary education. Previous research has shown that secondary students find hands-on activities more meaningful and engaging than more traditional and didactic approaches (Brooks & Brooks, 1999; Luke, 2014), without invoking a connection to theory about the role of play in education or how the inclusion of playful learning might communicate high teacher expectations. The student participant in this study who said, "I'm like a little child" (Jaida) described a relatable feeling of being in a playful state with her insightful words. Even as teenagers move further away from childhood, 'feeling like a child' captures an attitude of excitement and wonder that educators can harness by providing students with playful learning opportunities.

Author contributions All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Olivia Johnston. The first draft of the manuscript was written by Olivia Johnston and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions. This paper was written with the support from the Australian Department of Education Research Training Program.

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