Co-creation and decision-making with students about teaching and learning: a systematic literature review

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Abstract

Involving students in shaping their own education allows for more suitable, acceptable and effective education. We focus on how student voice is embodied in the context of teaching and learning as well as relevant factors for implementation and the impact of student voice activities on students' personal development and school connectedness. This systematic literature review provides an overview of qualitative studies which focus on involving 12–20 year-old students in co-creation and decision-making in the context of teaching and learning. The 15 included studies indicate that students were involved in various phases and were assigned multiple roles and responsibilities. There was a tendency to include students as advisors in planning, as co-researchers in acting/observing and as reviewers in reflecting. Relevant factors for implementation were knowledge, skills, beliefs about capabilities, optimism, emotions, social/professional role and identity, and social influences. Those students who participated increased their skills, confidence and ownership. Ongoing challenges remain with granting students various opportunities for taking diverse roles in each research phase. Future research is needed in more diverse school contexts and which assesses the long-term impact on students' development and their health, well-being and social position.

Keywords Co-creation · Curriculum · Decision-making · Student participation · Student voice · Participatory action research · Teaching and learning

Introduction

Seeking and listening to student perspectives can be a worthwhile endeavour since it provides unique insights into life in the classroom as well as the complexities of teaching and learning (Arnot, McIntyre, Pedder, & Reay, 2004). Moreover, involv-

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ing students has the potential of making education more meaningful and appropriate. Indeed, Brooker and McDonald (1999, p. 92) determined that student perspectives "have informed the development of the subject in ways that other stakeholders could not." This systematic literature review provides an overview of empirical studies which focus on involving secondary and vocational education students in co-creation and decision-making in the context of teaching and learning.

Historically, educational researchers have mainly been concerned with doing research 'on' or 'about' students (Kellett, 2010). In fact, students were, and sometimes still are, seen as passive recipients of education developed by others (Levin, 2000; McCallum, Hargreaves, & Gipps, 2000; Rudduck & Flutter, 2004). The absence of student perspectives was first noticed in the late 1970s and early 1980s (Cook-Sather, 2006a). Since then, the knowledge base concerning the possibilities and effects of different approaches involving students has grown substantially. As a result, various typologies of including young people in research and reform have been described (among others: Fielding 2004a, b; Hart 1992; Mitra 2007; Shier 2001), which generally present youth or student participation as a continuum or ladder ranging from no involvement to student-initiated research. Yet, these models are often hierarchal and imply a sequence from lower to higher, and thus better, levels of student participation. Moreover, most frameworks describe participation in terms of different levels with adults providing increasing degrees of control and power to young people (Horwath, Kalyva, & Spyru, 2012). In an effort to resolve these frequently heard critiques, Smit and colleagues (2011) visualised student participation as six different roles on a horizontal line, respectively students as research subject, information provider, advisor, reviewer, co-researcher, or driving force. In doing so, they emphasise that all phases in the process as well as distinct student roles are of equal importance. In line with this, Hart (1992) points out that research projects should be organised in such a way that every young person has the opportunity to decide which role suits their abilities, wishes, and needs best.

The developments concerning student participation typologies have been followed by a range of efforts striving to reposition students in educational research and reform. Positioning students as subjects or information providers is no longer sufficient; students should rather be viewed as initiators (Pinter, Mathew, & Smith, 2016). In other words, merely listening to student perspectives on itself does not suffice. Instead, listening should be linked to action and sincere intentions to respond to or at least negotiate based on what is heard (Cook-Sather, 2002, 2007; Schultz, 2003). Pairing listening with action is part of an ongoing re-tuning process as "we must continually relearn to listen—in every context, with each group of students, and with each individual student" (Cook-Sather, 2002, p. 11). These insights have led to the advent of the term 'student voice', which is a frequently used, yet complex term. Student voice can mean different things to different people in different settings. For some it is "synonymous with people simply expressing their point of view on a subject," whereas for others it requires "a much more involved act of participation where people engage with the organisations, structures and communities that shape their lives" (Hadfield & Haw, 2001, p. 488). To make matters even more complex, student voice and student participation are often used interchangeably. In this review, the term student voice will be used as it suggests more transformative changes by call-

ing for a wider cultural shift to "open up spaces and minds not only to the sound but also to the presence and power of students" (Cook-Sather 2006a, p. 363). Although no simple and fixed definition exists, we follow Cook-Sather (2006a, pp. 359–360) in basing student voice on the following beliefs: "that young people have unique perspectives on learning, teaching and schooling; that their insights warrant not only the attention but also the responses of adults; and that they should be afforded opportunities to actively shape their education."

Despite the rise of student voice activities, however, classroom practices continue to be predominantly shaped by established syllabi and agendas (Oliver & Oesterreich, 2013), which is to be expected as various scholars have pointed out that tokenism frequently underpins student voice initiatives (Fielding 2004a, 2006; Hart 1992; Rudduck 2007). Student voice is at risk of being appropriated by management to reach both government and school objectives. In other words, involving students does not only serve schools by alerting them to their own shortcomings concerning their performance, but also by coming up with means for improving their effectiveness (Bragg, 2007; Fielding, 2001; Thomson & Gunter, 2006). Indeed, Fielding (2001, p. 123) argues that "student voice is sought primarily through insistent imperatives of accountability rather than enduring commitments to democratic agency." As a result, instead of being an empowering or transformative experience, student voice may end up reinforcing the status quo and thus function as an additional mechanism of control (Fielding, 2001). Another concern revolves around the risk of meaning getting lost in translation as students are required to translate their own as well as their peers' experiences and subsequently make these accessible to others (Cook-Sather, 2011; Cook-Sather & Abbot, 2016; Mitra, 2007). In addition, these experiences need to be "articulated in a way that faculty can process without becoming defensive" (Cook-Sather & Abbot, 2016, p. 40). In turn, the original meaning of the expressed voice could get lost or altered (Cook-Sather, 2011; Cook-Sather & Abbot, 2016; Mitra, 2007).

At the core of these issues are underlying power dynamics and current hierarchal educational structures and relations. Indeed, while analysing projects in which teachers and school leaders worked collaboratively with students, Mayes and colleagues (2018, abstract) found that "the way we think about power has effects on what we see, feel and do." If we are to progress beyond "existing conversations within existing power structures" Cook-Sather 2006b, p. 4), there is a need for problematising and reflecting on concepts of power and existing norms and privileges. One way of achieving this is by challenging the pretexts of teaching and learning, i.e. the values, beliefs, and experiences which frame teachers' perceptions of everyday classroom practices (Knight-Diop & Oesterreich, 2009; Oliver & Oesterreich, 2013). Another opportunity lies in critically assessing whose voices are heard and whose interests they serve. Consequently, we should listen to those individual students that are kept silent within groups and broader contexts and recognise that not every voice carries equal legitimacy (Bragg, 2007; Cook-Sather, 2007; Fielding, 2001; Schultz, 2003). Hence, student voice cannot be 'captured' or 'identified' (Coll, O'Sullivan, & Enright, 2018), nor is it about 'succeeding' or 'getting there'; rather, it is a continuous process of listening and re-listening while concurrently adjusting and responding to what is heard (Cook-Sather, 2002, 2006c).

Despite the fact that students are increasingly recognised as the primary stakeholders in the educational system, the overwhelming majority of educational research still solely focuses on student perspectives and therefore continues to position students as mere information providers (Pinter et al., 2016). In those instances when research went beyond consulting students and thus was aimed at engaging students in decision-making processes within the school, the topics were limited to the familiar terrain of student councils and other student representation bodies, such as the school environment or hygiene and food facilities (Bragg, 2007). One of the areas where students have had few opportunities to express their perspectives, let alone be involved in decision-making, is teaching and learning. Student voice in the context of teaching and learning entails students' involvement in co-creation and decision-making regarding tasks which are generally performed by teachers, such as planning the learning process, assessment, and curriculum planning (Müller-Kuhn, Zala-Mezö, Häbig, Strauss, & Herzig, 2021). The curriculum in particular is rarely seen as a suitable arena for involving student voice (Brooker & MacDonald, 1999; Rudduck & Flutter, 2000). If sought at all, student voice is included in preliminary or concluding activities or after significant decisions have already been made (Dyson, 1995; Oliver & Kirk, 2015). In other words, curriculum making has been the realm of school management and teachers (Biddulph, 2011; Brooker & MacDonald, 1999).

Boomer (1992) developed a model which aspires to increase student voice in curricular decision-making processes, naming it 'curriculum negotiation'. This model entails "deliberately planning to invite students to contribute to, and to modify, the educational program, so that they will have a real investment both in the learning journey and in the outcomes" (Boomer, 1992, p. 14). For this process to come into being, the curriculum should be viewed as a process rather than a static product or entity (Bron, 2014). Furthermore, ownership is key (Cook, 1992), since negotiating the curriculum promotes active student engagement and involvement in their own learning (Enright & O'Sullivan, 2012; Oliver & Kirk, 2015). Moreover, negotiating the curriculum improves the relevance and quality of the subject, because it is better adapted towards the students' lived experiences as well as their wishes and needs (Bron, 2014). However, this does not mean that teachers should surrender all decision-making abilities to students. Instead, a purposeful collaboration should be formed in which teachers willingly share their authority and power with students by inviting them to engage in curriculum making through facilitating discussions, linking listening to action, valuing student perspectives and knowledge, and accommodating different views and opinions (Enright & O'Sullivan, 2010; hooks, 1994; Oliver & Kirk, 2015). Our objective is to underline the need for re-balancing the weights assigned to student wishes and needs as compared to the visions and goals of teachers and educational developers. Any non-negotiables or constraints should be explicitly stated beforehand (Boomer, 1992).

The overarching goal of curriculum negotiation is in line with prevailing ideas on student voice, as both strive for student empowerment. A negotiated curriculum may culminate in a redistribution of power and a sense of shared responsibility between teachers and students (Glasby & MacDonald, 2004). Schools could be seen as a natural setting for students to practice decision-making skills (Mitra, 2004) and voicing their own opinions and views (Enright & O'Sullivan, 2012; Oliver & Kirk, 2015).

Increasing efforts for student voice regarding teaching and learning provides opportunities for students to experiment with citizenship, democracy, and human rights (Bron 2014; Fielding 2004b; Rudduck and Flutter 2004). Thus far, those studies affording opportunities for students to be actively involved in teaching and learning have mainly focused on university students (e.g. Bergmark & Westman, 2016; Bovill, 2014; Carey, 2013). However, as Cook-Sather (2002, p. 10) argues: "we must share a commitment to redistributing power not only within the classroom, between teacher and students, but in society at large." Therefore, it is important to also include students from non-university contexts.

This systematic literature review includes studies which have gone beyond positioning students as mere subjects or information providers by recognising students as knowledgeable partners and creators of change. Thus far, such studies either targeted traditional student council topics and/or focused on university students. This review, therefore, aims to provide an overview of the few existing empirical studies which focus on how secondary and vocational education students are involved in co-creation and decision-making in the context of teaching and learning. The following questions will be answered: (1) How do 12–20 year-old students participate in student voice initiatives in the context of teaching and learning?, (2) What are relevant factors that influence the implementation of these student voice initiatives?, and (3) What is the impact of participating in such initiatives on students' personal development and school connectedness?

Methods

Study design

Relevant studies were identified through a systematic search using Boolean operators in ERIC, Scopus, Web of Science, and PubMed (consulted in March 2022). Three groups of keywords were used: doing research together with students (e.g. 'student voice', 'student-led'); concerning teaching and learning (e.g. 'curriculum development, 'school renewal'); and within a school context (e.g. 'education'). For each included study, references and citations were checked for additional relevant studies.

The inclusion criteria were: (1) empirical studies with qualitative design; (2) focus on secondary (also called middle, high or comprehensive school) or vocational education students between 12 and 20 years old; (3) set in high income countries, including Europe, North America and Oceania; (4) focus on student voice initiatives in the context of teaching and learning and which go beyond influencing students' individual learning processes; (5) change does not merely take place at student level, teachers and/or schoolboards are also expected to change as a result of the project; and (6) peer-reviewed articles published in English. Reviews, official reports, book reviews, theoretical articles, conference proceedings, editorials, and dissertations were excluded. PRISMA guidelines for systematic reviews were followed.

Search process and outcome

During the identification phase, which consisted of database searching and snowballing, a total of 5,987 studies were found. These were reduced to 4,420 after removing duplicates. During the ensuing phase, titles and abstracts were screened. Both these phases were performed by the first author. Many studies were excluded due to narrow interpretations of student participation and engagement, defining it as simply showing up or participating in class. Another frequent reason for exclusion was that those studies that went beyond involving students as information providers tended to focus on university students. When in doubt, the decision about including or excluding the study in question would be postponed until a later phase. During the eligibility phase, the studies (n=57) were assessed by the first author as well as a second reviewer (RR) to ensure reliability of proper application and interpretation of the inclusion and exclusion criteria. Assessment of the studies matched in 76% of the cases, indicating good agreement between reviewers. Those studies that led to disagreement were discussed until both reviewers agreed on the final decision. The main reasons for exclusion were: not focused on teaching and learning (n=14), students' influence was limited to individual learning process (n=5), and unsuitable research approach (n=5). After assessing the full texts and applying the inclusion and exclusion criteria, 15 studies were included; twelve of these were found through database searching and the remaining three via snowballing (see Fig. 1 for PRISMA diagram).

Quality appraisal

The checklist of Kmet and colleagues (2004, pp. 20–22) was used to assess the quality of included studies. The following 10 criteria were used: clear objective, evident and appropriate research design, context of the study, connection to wider body of knowledge, relevant and justified sampling strategy, systematic data collection methods, systematic data analysis methods, use of verification procedures, conclusion supported by results, and reflexivity. These were awarded points depending on to what extent each criterion was met (0='no', 1='partial', 2='yes'). Two authors (EG and HL) assessed the included studies separately. Scores were subsequently compared resulting in an inter-rater agreement score of 55%, indicating moderate agreement between raters. Most disagreement occurred between assigning either 'partial' or 'yes' (i.e. in 28% of all cases).

The quality of most articles was good: an extensive theoretical framework was used, the conclusions were supported by results, and the context was adequately described. However, some weaknesses were determined in use of verification procedures, data analysis, and reflexivity. Combining quality assessment of all 15 articles resulted in a summary score of 15 (maximum score: 20 points). Only two articles scored lower than 12 points during quality assessment.
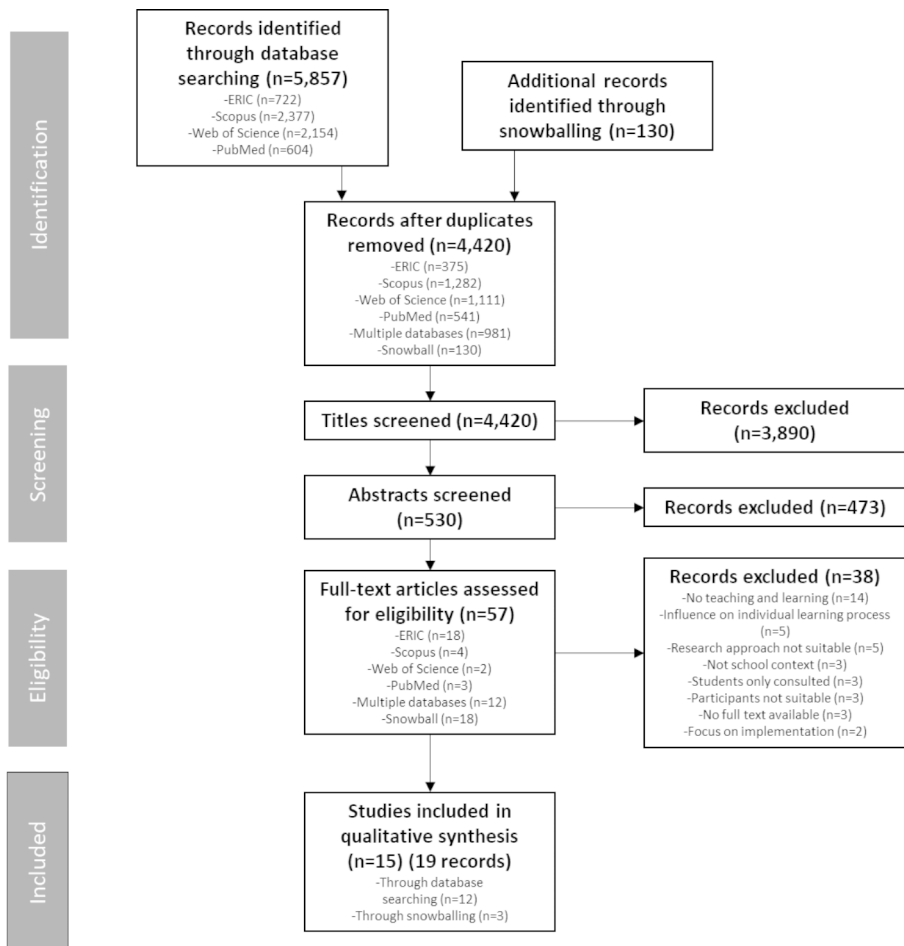
Fig. 1 PRISMA diagram

Data extraction

From each study, the following data were extracted: aim and context, participant characteristics, data collection and analysis methods, description of student voice initiatives in research phases, key findings, and implications.

Data analysis

In order to analyse the extracted data, content analysis in combination with two theoretical frameworks were used, i.e. the Action Research cycle and the Theoretical Domains Framework (TDF). Both frameworks will be discussed in more detail below.

Research question 1 – How do 12–20 year-old students participate in student voice initiatives in the context of teaching and learning? Action research allows researchers to engage with students as more than information providers and therefore provides a suitable framework for reflecting on the included studies. The Action Research cycle starts with participants determining the focus of inquiry, deciding on the desired improvement, and crafting a plan for observing and recording the activities (i.e. planning). Next, these activities are implemented and subsequently observed and monitored (i.e. acting/observing). This phase is then followed by critically reflecting on the outcomes of the action and, when necessary, revising the activities based on what has been learned (i.e. reflecting) (Creswell, 2015; Koshy, 2009; Pardede, 2019). "Action research rejects the notion of an objective, value-free approach to knowledge generation in favour of an explicitly political, socially engaged, and democratic practice" (Brydon-Miller, Greenwood, & Maguire, 2003, p. 11), and therefore students should be given opportunities to contribute during each phase (Berg, Bradford, Robinson, & Wells, 2018). The Action Research cycle was used as a tool for structuring our data analysis. This entailed categorising the student voice initiatives mentioned in each included study according to its three phases, which allowed for more in-depth and precise comparison between activities and within phases.

Research question 2 – What are relevant factors that influence the implementation of these student voice initiatives? and Research question 3 – What is the impact of participating in such initiatives on students' personal development and school connectedness? The TDF is an integrated theoretical framework synthesised from 128 theoretical constructs from 33 theories regarded most relevant by a group of behavioural and implementation scholars (Davis, Campbell, Hildon, Hobbs, & Michie, 2015; Michie et al., 2005). The framework consists of 14 domains: knowledge, skills, beliefs about capabilities, optimism, emotions, social/professional role and identity, social influences, beliefs about consequences, reinforcement, intentions, goals, memory, environmental context and resources, and behavioural regulation. These domains provide a theoretical lens for determining cognitive, affective, social, and environmental factors influencing behaviour (Atkins et al., 2017). Previous studies (e.g. Francis et al., 2009; Islam et al., 2012) have used the TDF for identifying influences on behaviour by exploring barriers and facilitators to implementing specific behaviours. In our case, the TDF contributed to determining which factors influence the implementation of student voice initiatives in teaching and learning (i.e. research question 2) as well as assessing the impact on students' development and their school connectedness (i.e. research question 3). As such the TDF provided a lens through which to view and categorise the extracted data. During this process, seven domains turned out to be most pertinent, respectively knowledge, skills, beliefs about capabilities, optimism, emotions, social/professional role and identity, and social influences (Cane, O'Connor, & Michie, 2012; Michie et al., 2005).

Results

Characteristics of included studies

The 15 included studies were conducted in various countries: six in the USA, three in Ireland, two in the UK, one in the Netherlands, one in the Netherlands and Belgium, one in Australia, and one in Canada. Eight studies conducted participatory action research and/or used an activist approach. One study carried out collaborative research and therefore also had a distinct participatory element. Four studies used qualitative research methods, such as interviews, (focus) group discussions, and class observations. Although two studies did not specify their research approach, they used at least one of the qualitative research methods mentioned above. The types of schools included were middle, secondary, and high schools as well as a Jewish day school. None of the studies focused on vocational education. Eight studies included one school, while four studies included multiple schools ranging from two to seven. In total, 28 schools were involved. Students' age ranged from 12 to 19 years old. In eleven studies, student voice initiatives in the context of teaching and learning were negotiated between teachers and their class(es). Schools in three studies set up school-specific teams consisting of various stakeholders, one study founded school-specific teams consisting solely of students, and one study combined meetings with stakeholders between and within schools. In the majority of studies, students were involved in co-creation and/or decision-making processes concerning the curriculum, mainly physical education (n=6) and biology (n=2). The duration of the projects varied between five months and three school years, with the majority lasting about one school year. Data collection took place between 1996 and 2019. For an overview of the included studies see Table 1.

Student voice in teaching and learning

Fourteen studies included students in planning, ten studies in acting/observing, and eight studies in reflecting. Seven studies reported on student participation in all three phases (see Table 1).

Planning – Many studies did not specify who initiated the project, but those that did largely mentioned scholars as the main driving force (Berg et al., 2018; Coll et al., 2018; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Nuñez Enriquez & Oliver, 2020; Pennisi, 2013). Scholars also tended to determine the focus of inquiry or problem statement. However, there were two exceptions. As part of the 'Students as Researchers' project by Fielding (2001), students themselves identified issues for inquiry they found important in their daily lives at school. In case of the Got health?-initiative by Berg and colleagues (2018), the overall focus on mental health had already been decided, but students were given opportunities to shape their own inquiry questions.

Projects frequently started with activities aimed at getting to know each other, or more specifically, finding out who the students were and what was important to them (Biddulph, 2011; Coll et al., 2018; Enright & O'Sullivan, 2010, 2012). This was often paired with students reflecting on their own assumptions, views, and previous

learning experiences as well as their prospective involvement in the project (Coll et al., 2018; Enright & O'Sullivan, 2010, 2012; Shilcutt, Oliver, & Aranda, 2021, 2022).

In four studies students were only involved during the planning stage (Bloemert, Paran, & Jansen, 2020; Bron, 2014; Bron, Bovill, & Veugelers, 2018; Fielding, 2001; Kohn, 2017). Bloemert and colleagues (2020) presented a specific teaching and learning model to four students, who were asked to first individually and subsequently as a group interpret and discuss each element. These data were then coded and analysed by the researcher together with the teacher. The adjusted elements were later presented to the same students for validation. The same process was repeated with another group of students. Bron and colleagues (2014; 2018) used so-called prompt sheets in which students were individually asked about existing knowledge and potential inquiry questions. In groups, students then had to negotiate and reach consensus on a set of questions which would guide the ensuing lessons. In Fielding's study (2001), students, supported by staff, engaged in data collection and analysis, presented their results, and came up with recommendations. Kohn (2017) organised multiple rounds of consultations with students, teachers, subject experts, and the school board in order to develop the Jewish Studies curriculum.

Even though students were able to express their views and come up with recommendations in these four studies, it was ultimately up to teachers or the school to decide to what extent student input would be incorporated. As a result, their role was limited to being advisors.

Acting/observing – Numerous studies offered taster or sample sessions to their students with the aim of enriching their knowledge base and increasing their frame of reference, which is believed to aid in making decisions concerning the curriculum (Coll et al., 2018; Enright & O'Sullivan, 2010, 2012; Howley & Tannehill, 2014; Nuñez Enriquez & Oliver, 2020; Shilcutt et al., 2021, 2022). These sessions not only varied in content, but also in didactical and assessment strategies as well as different roles and responsibilities for students (Enright & O'Sullivan, 2010, 2012; Shilcutt et al., 2021, 2022). Those studies using taster sessions also organised frequent debriefing sessions, in which students and teachers would reflect on the different elements of the taster session. Subsequently, ways for incorporating feedback in future lessons would be explored and planned (Enright & O'Sullivan, 2010, 2012). Although the studies by Guadalupe and Curtner-Smith (2020) and Wahl-Alexander and colleagues (2016) did not organise taster sessions, they did create myriad formal and informal opportunities for students to individually as well as in various group compositions share ideas, discuss opinions, negotiate content and delivery, and reflect on the curriculum.

The study by Berg and colleagues (2018) stands out from the others in the sense that the acting and observing mainly took place outside the classroom. Each school team, consisting of students, teachers and school district staff members, was assisted by the researchers and coordinator to implement the next steps of their projects as well as to connect each group to other schools and partners in support of their endeavours.

In summary, those studies that included students in acting/observing provided many examples of activities that strive to involve students as co-researchers and therefore shared decision-making predominantly took place in this phase.

Table 1 Overview of included studies

Author(s) and year	Country	Approach and methods	Participants	Student voice initiatives with whom?	Focus of project	Students involved in (1) Planning, (2) Acting/observing and/or (3) Reflecting
Berg et al. (2018)	Canada	Action research	Two middle schools and two senior secondary schools. Per school: 2–8 student leaders (12–18 years old), one lead teacher, two school district staff members. Researchers	School-specific teams consisting of various stakeholders	Student-led mental health initiative "Got Health?"	1, 2, 3
Biddulph (2011)	UK	Not specified, but uses various qualitative research methods	Seven secondary schools. Per school: 4 students (13–17 years old), at least one teacher and three academic geographers and geography teacher educators. Researcher	Combination of meetings between various stakeholders transcending school boundaries as well as school-specific teams	Geography	1, 3
Bloemert et al. (2020)	The Netherlands	Not specified, but uses various qualitative research methods	Three secondary schools. Written reflective accounts and unguided focus groups: 8 students (15–16 years old). Survey: 260 students (15–18 years old). Three teachers. Researchers	Teacher(s) and own class(es)	English as a foreign language literature teaching and learning model	1
Bron et al. (2018), Bron (2014)	The Netherlands & Belgium	Qualitative research	Two secondary schools. School 1: 94 students (12–13 years old) and one teacher. School 2: 14 students (14–15 years old) and one teacher	Teacher(s) and own class(es)	Nature, health and/or biology	1
Coll et al. (2018)	Ireland	Youth participatory action research	One secondary school. Cohort 1: 27 students (15–17 years old). Cohort 2: 16 students (15–17 years old). Relationships and Sexuality Education coordinator. Researchers	Teacher(s) and own class(es)	Sexuality education	1, 2, 3

Table 1 (continued)

Author(s) and year	Country	Approach and methods	Participants	Student voice initiatives with whom?	Focus of project	Students involved in (1) Planning, (2) Acting/observing and/or (3) Reflecting
Enright & O'Sullivan (2010, 2012)	Ireland	Participatory action research	One secondary school Cohort 1: 13 female students (15–19 years old) Cohort 2: 28 female students (15–19 years old) One teacher Researchers	Teacher(s) and own class(es)	Physical education	1, 2, 3
Fielding (2001), Bragg (2007)	UK	Collaborative research	One secondary school Three cohorts of 15 to 20 students (13–17 years old) Three supporting members of staff Previous cohort participants functioned as student consultants Researcher	School-specific student research groups	Student-led projects, e.g. life skills program, school's assessment system and student experience of trainee teachers	1
Guadalupe & Curtner-Smith (2020)	USA	Activist approach: various qualitative research methods	One middle school 45 students (12–13 years old) One teacher	Teacher(s) and own class(es)	Physical education	1, 2, 3
Howley & Tannehill (2014)	Ireland	Participatory action research	One secondary school 24 students (15–16 years old) One teacher One teacher-researcher	Teacher(s) and own class(es)	Physical education	1, 2, 3

Table 1 (continued)

Author(s) and year	Country	Approach and methods	Participants	Student voice initiatives with whom?	Focus of project	Students involved in (1) Planning, (2) Acting/observing and/or (3) Reflecting
Kohn (2017)	Australia	Qualitative research	One Jewish day school Judaic studies teachers, student body representation, subject and curriculum experts and the school board 40 students participated in focus group discussions	School-specific teams consisting of various stakeholders	Jewish Studies	1
Nuñez Enriquez & Oliver (2020)	USA	Activist approach: various qualitative research methods	One middle school 13 students (12–14 years old) Two researchers Three college graduate and undergraduate students	Teacher(s) and own class(es)	After school sports club	1, 2
Pennisi (2013)	USA	Participatory action research	One secondary school 24 students (13–14 years old) One teacher Researcher	Teacher(s) and own class(es)	Arts	2
Seiler (2011)	USA	Qualitative research	One high school One class (age unknown) with teacher-researcher	Teacher(s) and own class(es)	Biology	1, 2
Shilcutt et al. (2021, 2022)	USA	Participatory action research, activist approach	One middle school Cohort 1: 8 students (12–14 years old) Cohort 2: 12 students (12–14 years old) Researchers	Teacher(s) and own class(es)	After-school dance club	1, 2, 3
Wahl-Alexander et al. (2016)	USA	Qualitative research	One middle school 18 male students (12–14 years old) One teacher	Teacher(s) and own class(es)	Physical education	1, 2, 3

Reflecting – Seven out of eight studies that involved students in reflecting did so via focus group discussions at the end of the project (Berg et al., 2018; Coll et al., 2018; Enright & O'Sullivan, 2010, 2012; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Shilcutt et al., 2021, 2022; Wahl-Alexander, Curtner-Smith, & Sinelnikov, 2016). In this phase, students were predominantly involved as reviewers.

Four studies reported on interviewing their teachers at the end of the project (Bron, 2014; Bron et al., 2018; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Wahl-Alexander et al., 2016). In some cases, these interviews were compared to interviews conducted at the start of the project (Bron, 2014; Bron et al., 2018; Guadalupe & Curtner-Smith, 2020; Wahl-Alexander et al., 2016). Additionally, two studies conducted stimulated recall sessions with teachers (Guadalupe & Curtner-Smith, 2020; Wahl-Alexander et al., 2016).

Relevant factors for implementation of student voice initiatives in teaching and learning

Knowledge and skills – These two domains were combined since the included studies hardly made any distinction between acquiring theoretical information and practical skills. Doing something new together can be challenging and difficult. Indeed, many studies reported that the process was not easy, as working collaboratively can be demanding and requires a lot in terms of knowledge and skills from both students and teachers (Berg et al., 2018; Bron, 2014; Bron et al., 2018; Coll et al., 2018; Enright & O'Sullivan, 2010, 2012; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Nuñez Enriquez & Oliver, 2020; Pennisi, 2013; Seiler, 2011; Wahl-Alexander et al., 2016). Just two studies provided training for all participants involved in the project (Berg et al., 2018; Fielding, 2001), even though listening together –students and teachers alike– was found to be an ongoing process in which participants must continuously learn how to do this in relationship to each other (Shilcutt et al., 2022). In addition, only one study educated students in basic research skills (Enright & O'Sullivan, 2010, 2012). Merely two studies provided training for teachers (Bloemert et al., 2020; Guadalupe & Curtner-Smith, 2020), despite the fact that teachers require specific competences as they are expected to maintain a sense of direction while also being open to student input (Bron, 2014; Bron et al., 2018). Furthermore, it is assumed that teachers are able to capture a wide range of student voices, albeit many studies were aware of ongoing ambiguity surrounding student voice as well as the challenges of who gets heard and who does not. Hence, it is unsurprising that including a multitude of student voices remained troublesome (Biddulph, 2011; Howley & Tannehill, 2014).

Beliefs about capabilities – This domain is especially important for students since at the start, they were often hesitant or lacked the belief in their own abilities. Working collaboratively with adults and being actively involved in teaching and learning is thought to lead to increased empowerment, which, in itself, is an important objective of many action research projects. Besides, growing in self-confidence and self-esteem will allow student voices to become more prominent and constructive (Coll et al., 2018; Howley & Tannehill, 2014; Shilcutt et al., 2021, 2022). Teachers are crucial in increasing students' perceived competences and capabilities by offering guidance,

support, encouragement, and insights (Biddulph, 2011; Howley & Tannehill, 2014). They also play a role in openly acknowledging student voices as well as underlining that these have legitimacy. Students must feel that their voices are sincerely appreciated and that they know their input will be used (Bloemert et al., 2020; Enright & O'Sullivan, 2010, 2012; Howley & Tannehill, 2014).

Optimism – A number of studies reported that at the start of the project, some teachers had concerns or reservations about to what extent student ideas would be sensible and whether students were up for the task of negotiating and collaborating with them (Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014). This resulted in reluctance to include students in making curriculum decisions as well as underestimating students' abilities (Bron, 2014; Bron et al., 2018; Guadalupe & Curtner-Smith, 2020). According to Howley and Tannehill (2014, p. 415), teachers "need to have the mettle and faith to engage with students."

Emotions – For teachers, allowing students to make decisions regarding their teaching and learning resulted in all kinds of emotions, such as anxiety, insecurity, uncertainty, and/or chaos (Biddulph, 2011; Bron, 2014; Bron et al., 2018; Enright & O'Sullivan, 2010, 2012; Howley & Tannehill, 2014). "Indeed, the dissonance caused by the clash between [the teacher's] allegiance to and comfort with traditional pedagogies and local and state standards and the new form of teaching [the teacher] was attempting, led to a prolonged period of destabilization" (Guadalupe & Curtner-Smith, 2020, p. 914).

Social/professional role and identity – If we want to incorporate students as equal partners in purposeful negotiation with teachers, this calls for re-imagination as well as adaptation of their relationships (Bragg, 2007; Fielding, 2001; Howley & Tannehill, 2014; Nuñez Enriquez & Oliver, 2020). Only then may a radical shift in roles, responsibilities, and power occur (Howley & Tannehill, 2014). However, this shift does not happen overnight and both teachers and students need time to adjust to these new roles and responsibilities (Bron, 2014; Bron et al., 2018; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014). Teachers should reflect on existing operational patterns as well as the types of interactions they have with their students (Howley & Tannehill, 2014; Shilcutt et al., 2021, 2022). In doing so, they question their "own assumptions, motivations and readiness to work with young people" (Coll et al., 2018, pp. 161–162) and subsequently open the way for new routes forward. Although teachers found it difficult to keep quiet, avoid interfering or 'let go' (Pennisi, 2013; Wahl-Alexander et al., 2016), these were essential actions that helped students in becoming engaged in teaching and learning. Nonetheless, meeting certain goals and objectives as well as external requirements ultimately remains the responsibility of the teacher. The perceived pressure that comes along with these beliefs may result in teachers sticking to the textbook or limiting students in their co-creation and decision-making opportunities (Bron, 2014; Bron et al., 2018). What is more, in the study by Guadalupe and Curtner-Smith (2020), this focus on traditional benchmarks and standards prevented the teacher from seeing the progress students had made during the course. In other words, it was difficult to broaden the teacher's perspectives on what 'achievement' and 'learning' could entail. Students were also constrained by limited assumptions about what is possible as well as what the purpose of certain education should be. It was challenging to go beyond 'appropriate'

learning activities and content typically associated with the specific subject (Coll et al., 2018; Guadalupe & Curtner-Smith, 2020; Pennisi, 2013; Shilcutt et al., 2021, 2022). Taster sessions (Coll et al., 2018; Enright & O'Sullivan, 2010, 2012; Howley & Tannehill, 2014; Nuñez Enriquez & Oliver, 2020; Shilcutt et al., 2021, 2022) and tapping into prior learning experiences and students' interests contributed to thinking about the "not yet imagined, not yet in practice, not yet in sight" (Fine, 2006, p. 100).

Social influences – Although building relationships requires significant time investment and commitment, the gains can be high as well, as is confirmed by Howley and Tannehill (2014), who noted that strong relationships between teacher, students and researcher were instrumental for the success of the study. Group dynamics are indeed an important factor. Bron and colleagues (2018) established that in working together with groups of students, groups with the highest degrees of student leadership, made the most progress. However, finding consensus within and between groups can be challenging and may result in ways forward which for some participants are difficult to come to terms with (Kohn, 2017).

Impact on students' personal development and school connectedness

Skills – Students learnt and practised many skills regarding inquiry, critical thinking, problem solving, self-reliance, negotiating, working together, and taking initiative (Berg et al., 2018; Bron, 2014; Bron et al., 2018; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Shilcutt et al., 2021, 2022; Bragg, 2007, p. 350) established that students "through their involvement in [the project], had become confident about expressing views that differed from the majority."

Beliefs about capabilities – Numerous studies observed an increased sense of confidence, ownership, and empowerment among students (Enright & O'Sullivan, 2010, 2012; Howley & Tannehill, 2014; Pennisi, 2013). In turn, this may lead to increased self-efficacy and liking for school, which was confirmed by several studies which observed increased participation, commitment, and engagement as well as increased enthusiasm and joy (Enright & O'Sullivan, 2010, 2012; Guadalupe & Curtner-Smith, 2020; Howley & Tannehill, 2014; Pennisi, 2013; Shilcutt et al., 2021, 2022; Wahl-Alexander et al., 2016). For example, Enright and O'Sullivan (2010, 2012) observed that the girls in their study were more eager and prepared to participate in class. Moreover, their investment increased tremendously as they worked hard to ensure that the decisions they had made worked.

Social influences – Some studies recognised that the relationship and cooperation between students and teachers improved (Howley & Tannehill, 2014; Pennisi, 2013; Wahl-Alexander et al., 2016). On the one hand, these collaborative projects made teachers appreciate student input and corrected some of their deficit assumptions about students (Bron, 2014; Bron et al., 2018; Seiler, 2011), which resulted in students feeling more valued (Enright & O'Sullivan, 2010, 2012). On the other hand, students also seemed to respect the perspectives and considerations of their teachers more (Howley & Tannehill, 2014). What is more, Wahl-Alexander and colleagues (2016) found that relationships between students of various levels within the class seemed to have improved.

Discussion

This systematic review aimed to answer three questions. Research question 1 focused on how 12–20 year-old students participated in student voice initiatives in the context of teaching and learning. We established that although students were involved in the planning phase in almost every study, participation was predominantly passive and mostly limited to advising.

During the acting/observing phase, students had more profound roles and responsibilities. Many studies organised activities with the aim of engaging students as co-researchers, which allowed students to use their knowledge and expertise concerning the social contexts of their learning as well as their everyday experiences at school. Students were least involved in reflecting and if they were involved at all, their role was limited to sharing their perspectives and experiences at the end of the project. Regarding the focus of inquiry, we found that those subjects that were opened up to co-creation and decision-making with students were mainly "low-stakes" curriculum areas, such as physical, sexuality, or arts education. In terms of participants, we did not identify any studies that worked collaboratively with vocational education students and even though we gained a deeper understanding of how secondary students participated in student voice initiatives, their involvement in co-creation and decision-making in the context of teaching and learning was quite limited. Therefore, these initiatives cannot be expected to be transformative.

Research question 2 focused on the relevant factors that influence the implementation of student voice initiatives in the context of teaching and learning. As mentioned above, student voice initiatives were not adequately implemented, which may be explained by numerous factors. Provoking radical shifts in social/professional roles and identities is not only a time consuming endeavour, it may also result in all kinds of emotions. Many teachers had low levels of optimism or even concerns about inviting students to participate in co-creation and decision-making. Therefore, it should come as no surprise that initially student voice activities led to anxiety and chaos among teachers. Moreover, most teachers did not possess the necessary competences to work collaboratively with their students, which prevented them from sufficiently guiding their students in finding and expressing their voice. What is more, few studies provided training to either teachers or students. It appeared that students were often hesitant at the start and lacked beliefs about their capabilities. However, in those instances when they succeeded in being more involved, their confidence grew. Teachers were vital in this process of increasing their students' perceived competences by offering guidance, support, encouragement and insights. This underlines all the more the significance of appropriately preparing, training, and supporting teachers in their role of promoting student voice.

Research question 3 focused on the impact such initiatives may have on students' personal development and school connectedness. Although good examples of student involvement in co-creation and decision-making were scarce, a number of studies reported that students' sense of confidence, ownership, and empowerment grew, which resulted in increased beliefs about their capabilities. In turn, this may lead to increased self-efficacy and liking for school. Thus, even though student voice initiatives were flawed, the results of the few studies assessing the impact on students'

personal development and school connectedness seem to be hopeful. When implemented adequately, student voice initiatives are likely to positively impact the personal development and school connectedness of students. Therefore, these findings should encourage us to continue promoting and improving student voice initiatives in the context of teaching and learning.

In this review only those studies that strived to go beyond positioning students as subjects or information providers were included. Nonetheless, we observed many differences in to what extent these studies genuinely succeeded in working collaboratively with students. Each study only included a small sample size of students and predominantly focused on the micro level. On the one hand, this is in line with the principles of action research which promote bottom-up activities and interpersonal relationships as well as the need for recognising variations, and therefore different possibilities and requirements, in local contexts. On the other hand, however, in order to successfully implement student voice activities in teaching and learning, we have to gain a deeper understanding of relevant meso and macro factors influencing practice at the classroom level. With the Ecological Systems Theory (Bronfenbrenner & Morris, 1998) in mind, it is evident that there is still a long way to go before student voice is structurally ingrained in the educational system. Although continuity of student voice initiatives at school is crucial, the included studies were primarily short-term projects and it is unclear to what extent these projects were able to work towards sustainability. In some included studies the short-term impact of participating in student voice activities in the context of teaching and learning regarding for example students' personal development was assessed. Their results appear to be promising. However, very little is known about the long-term impact of student voice in teaching and learning.

The focus should not exclusively be on increasing the frequency and scale of student voice activities. Rather, we should look for ways to expand and improve the intensity, nature, and quality of these activities. Moreover, we found that students were granted similar roles in similar research phases, whereas students should be presented with various opportunities for taking diverse roles in each research phase. Student participation in teaching and learning may also impact students' health and well-being. For example, Berg and colleagues (2018, p. 43) found that "in creating healthier school settings, students described greater social and emotional wellbeing and were motivated to provide positive mental health initiatives." This underlines the potential of student voice activities in the school context for improving the health, well-being, and social position of students.

To our knowledge, this is the first systematic literature review combining studies that included secondary school students in co-creation and decision-making regarding teaching and learning. Moreover, each study went beyond including students as subjects or information providers by recognising students as primary stakeholders as well as adequate creators of change. The action research cycle and TDF provided interesting lenses for comparing commonalities and differences between studies.

Some limitations are worth mentioning. Firstly, there is a risk of publication bias. Not all initiatives including student voice in the context of teaching and learning are studied scientifically or will be published and therefore it is likely that other good examples exist. Moreover, given the complexity of involving students in teaching

and learning, these projects tend to face many difficulties and are therefore less likely to be published. Nonetheless, our objective was not to come up with an exhaustive overview, rather we wanted to combine and compare methods, approaches and settings. Secondly, selection bias may have occurred during the literature search. However, during the eligibility phase, two authors blindly assessed the remaining articles, resulting in an inter-rater agreement of 76% of the cases, indicating good agreement between reviewers. Thirdly, this review combines reported interpretations rather than raw data. Nonetheless, many of the articles provided excerpts to support their results, which increased transparency. Moreover, two authors qualitatively appraised all included studies and determined that the overall quality was good.

Practice implications

Teachers should be assisted in developing and implementing student voice initiatives in the classroom and in the school context. This starts by educating teachers-in-training in the principles of action research and how to work collaboratively with students. Teachers should also be offered professional development courses to discuss, train, practice and implement sharing power with students as well as setting in motion a shift from more traditional towards more egalitarian roles in education.

Future research should include working collaboratively with students in vulnerable positions as well as in more diverse school settings, for example in vocational or technical education. More research is also needed to assess micro, meso and macro factors which influence the implementation of student voice activities in teaching and learning. Lastly, research should concentrate on assessing the long-term impact of participating in teaching and learning on students' development, but also their health, well-being and social position.

Conclusion

This literature review has underlined the importance of including students as more than information providers in the context of teaching and learning. Students were included in various phases and were assigned multiple roles and responsibilities. Relevant factors for implementation were knowledge, skills, beliefs about capabilities, optimism, emotions and social/professional role and identity. Those students who participated increased their skills, confidence, ownership and empowerment.

Declarations

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