How Do High School Students Create Knowledge About Improving and Changing Their School? A Student Voice Co-Inquiry Using Digital Technologies

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Abstract:

A growing body of work in the field of student voice research now involves students as co-collaborators. Small-scale inquiries increasingly provide opportunities to incorporate digital technologies into participative research with young people. This article presents the findings of an inquiry that seized on ideas of "students as knowledge creators" and "democratic fellowship" to explore the question: What makes a good school? Twelve students representing different

age groups in a comprehensive high school in Australia were coached in "knowledge creation" in a workshop led by an academic partner. This co-inquiry was designed to maximize student involvement and engagement in research processes using software applications. The design included developing skills in survey construction and focus group facilitation among a larger group of peers. Results demonstrated not only a readiness to use these skills but also enthusiasm to investigate what their peers believed would make their school a better place. Emerging themes included students' wanting more responsibility for their own learning, improvements in the school's physical environment, and the use of more technology in classroom learning. This small-scale inquiry was part of a comprehensive investigation that focused on improving the school's strategy of positive behaviors through consultations with staff and community stakeholders. Further research that harnesses digital technologies to the skills of "students as knowledge creators" and collaborators is recommended.

Keywords: student voice, digital technology, student agency, STEM

Participation of young people in decision making in schools is not new (Fielding, 2011; Flutter & Rudduck, 2004; Groundwater-Smith 2015; Mayes & Groundwater-Smith, 2013; Mitra, 2003; Simmons, Graham, & Thomas, 2015). Representative student bodies or school councils and youth parliaments have historically provided avenues for consultation and a forum for students' ideas. However, digital technology is increasingly being used to capture and disseminate experiences of school as part of broader student consultation processes (Savin-Baden & Tombs, 2017). In a study conducted by Facer (2011) in the United Kingdom the question arose: While most children had a computer at home, what could personal digital technology usage mean for the future of schooling, and what opportunities might it provide for students to become "more technically vocal" in their education contexts (p. 128)?

Access to digital technology, software applications, and interactive tools in classrooms and in homes are features of contemporary life in many parts of the world (Evers & Kneyber, 2016; Hunter, 2015; Savin-Baden & Tombs, 2017). The term *digital technology* in this article refers "to tools created by human knowledge to combine resources to produce desired products, solve problems, fulfil needs or satisfy wants" (Hunter, 2015, p. 22). Education jurisdictions use data generated by digital technology to make pronouncements on how well or otherwise schools are performing (OECD, 2016). Less often, teachers and school leaders use data collected from student collaborators to find out how they like to learn, give feedback on their state of wellbeing, or learn what it is like to

be a learner in the classroom of the school they attend (Birkett, 2001; Clark, 2010; Redecker, 2014). However, as argued by Selwyn (2014), the promise of more democratic, fairer roles for digital technologies has not been realized. He expresses unease with "the gulf that persists between the rhetoric of how digital technologies *could* be used in education and the realities of how digital technologies are *actually* used in education" (p. vii).

Across the globe effective technology integration in learning in schools is uneven (Evers & Kneyber, 2016; Hunter, 2015; OECD, 2016; Ward & Parr, 2011). For wholesale change in students' use of digital technologies to be reflected in improved learning outcomes, more research and ongoing resourcing with significant investment in schools and teachers by governments are needed (Hunter, 2015; Ito et al., 2013; Sellar, 2015). Change in schools is notoriously slow, and the demands of a digital age are considerable given the rate of technological obsolescence as one platform, device, or application is superseded by another (Fullan & Langworthy, 2014). One way to effect positive action for the role of digital technology in schools is to involve young people. Digital technology can support what matters to them. However, few studies to date document how digital technology is used in student voice research and how it might be used differently to enhance the democratization of schools (Boss, 2012; Davis & Hill, 2006; Fielding, 2011; Groundwater-Smith, 2015; Manca & Grion, 2017; Seale, 2009).

A study at a primary school in Australia involved students using their digital skills to show leadership by assisting teachers to use technology more

effectively in their classrooms (Gibbes, 2014). Other approaches empowering young people to use digital technology in project and inquiry-based learning were also useful when they focused on real-world issues, thereby developing a sense of autonomy and agency in students (Boss & Krauss, 2014; Duke, Halvorsen, & Strachan, 2016; Hunter, 2015; Larmer, Mergendoller, & Boss, 2015).

The study that this article details—how mobilizing the collective intelligence of young people for co-inquiry using digital technology—allowed a larger group of students to have their voices heard on how to improve their school. Within this context, the article examines how the students created knowledge about improving and changing their school using technology and collaboration skills enacted in a process of consultation with peers.

The warrant for the research was underpinned by two research questions:

1. How might schools improve through preparing a group of students to act as knowledge creators to better understand "what makes a good school"?

2. Can digital technologies play a role in giving students a voice in knowledge creation in small-scale inquiry?

Background Literature

Scholarship on student voice research and its focus on the purpose of education to involve all school participants and to educate students into democratic citizens is widely documented (for example, Groundwater-Smith,

2015; Manca & Grion, 2017; Seale, 2009; Simmons et al., 2015). This body of literature includes scholarship that argues for the validity of student voice as a strategy for school reform (Cook-Sather, 2006; Fielding, 2001, 2011). Rudduck and Flutter (2004) implore teachers in schools to "take seriously what students tell us about their experience of being a learner in school—about what gets in the way of their learning and what helps them to learn" (p. 15). Moreover, Groundwater-Smith and Mockler (2009) advocate for the notion that "teachers and schools as knowledge creation sites provide rich territory for the possibilities of student researchers to co-inquire and deeply know about their education venues" (p. 23).

Within schools where students co-inquire, partnership patterns between adults and young people demonstrate that school staff often take leading roles (Mayes & Groundwater-Smith, 2013). And, when such moments for leadership are extended to students for co-research or inquiry, they can create new knowledge that makes a difference to life at school (Fielding, 2011; Rudduck & Flutter, 2004). Such activities remind us of how power relations are differentiated in such arrangements and that their influence on the conduct of school-based inquiry must not be underestimated. However, as Groundwater-Smith and Mockler (2009) write, when students become researchers "they will have greater agency—even so, we must concede it is difficult for them to imagine something different from that in which they are already incorporated" (p. 91). Finding ways to facilitate student agency is central to effective collaboration.

When students are knowledge creators at education sites, as Fielding (2011) applauds, "it intensifies and increases the egalitarian thrust of the co-enquiry approach … the voice of the students comes to the fore in a leadership or initiating, not just a responsive role" (p. 71). His term "knowledge creator" refers to "students who take a lead partnership role with active staff support" (p. 71). Fielding (2004) claims that social settings and identity shapes the ways both teachers and students view the world. Similarly, language and images are saturated with values. Despite these limitations, student voice remains important when seeking to personalize learning and make it more meaningful for students. At the time, Fielding (2004) also asked important questions about using student voice research "to re-describe and reconfigure students more securely into the fabric of the status quo" (p. 302)—a timely possibility that still requires action.

In a study conducted by Bland and Atweh (2007), students were identified as particularly powerful "insiders" because of the knowledge they provided about the various conditions in schools that affected them. These researchers also recognized that significant problems arise when students' voices are heard, particularly "the need for [them] to find new places in the power dynamics of the school" (p. 340). However, not all consultation with students is liberatory practice where student voice enables positive change and democratization (Manca, & Grion, 2017; Rudduck & McIntyre, 2007).

When using digital technology in student voice research studies conducted in Coalition Schools in Sydney, Australia, Groundwater-Smith and Mockler (2009) noted that visual metaphors and photography were effective for

presenting and capturing ideas of school. In particular, they reported that digitally

generated graphics are useful in discussions with young people as a means to

draw out views and observations. In more recent studies capturing student voice

in co-inquiry, tools like videoconferencing are useful for academic partners who

want to lead and engage students in school-based research (Hunter & Mitchell,

2011; Savin-Baden & Tombs, 2017). However, the use of digital technology by

students in schools, especially video material and images to engage in learning,

is not new (Hunter, 2015; Kearney & Schuck, 2006; Pink, 2012). What it offers is

enhanced participatory opportunities for student voice in education research

(Beetham & Sharpe, 2013; Czerniawski & Kidd, 2011; Gosper, Malfoy, &

McKenzie, 2013).

Useful here is Fielding's (2011) typology, which he calls "patterns of

partnership" or forms of interaction between adults and students at school that

included "how adults listen to and learn with students in school" (p. 74). In

particular, his fourth pattern, the "instrumental dimension," acknowledges

"students as knowledge creators" (p. 74). The study in this article examines how

a group of students chosen by school staff engaged in processes of knowledge-

creation around the question of "what makes a good school." The group of

students involved in the process of co-inquiry believed many of their everyday

experiences at school could be improved (Groundwater-Smith & Needham,

2011). Moreover, these students embraced the idea of working with a

"trustworthy outsider," in this case an academic partner (AP) who was known to

school leadership, teachers, and students, and from whom they could learn

some data gathering skills using digital technology to forge their own

understandings (Hunter & Mitchell, 2011).

Context and Participants

The School

Situated in the southwest region of a large city in New South Wales,

Australia, Gregson High School (GHS) is a boys' comprehensive secondary

school comprising junior (Grades 7-10/12-16 year-olds) and senior high school

enrollments (Grades 11-12/17-18 year-olds), of which 90% come from

backgrounds other than English—mainly Arabic-speaking and Pacific Islander

communities. GHS has a thriving music, dance, and arts program. It is important

to note that in Australia, the term *comprehensive* refers to a public high school

that does not select its intake on the basis of academic achievement. In 2012 the

school joined an education partnership program for low socioeconomic status

schools within its state-run jurisdiction. A video of a student-run canteen at the

school (the school has a philosophy of consulting young people) that serves as a

community meeting point "went viral" on YouTube.

Participants

This small-scale inquiry was built on earlier work of Groundwater-Smith

and Needham (2011), which involved academic partners and groups of students

as co-researchers and used the notion of "listening to the voices of students in

our schools" (Groundwater-Smith & Downes, 1999, p. 7). Starting points for this

investigation were questions posed from the previous study, where prior student

consultation had canvassed issues such as good teachers, learning, safety, and homework. The particular timing of this inquiry meant the executive staff selected the group of student "knowledge creators" (N=12) to work with the AP (the first author of this article). This study limitation is discussed later in the article.

The 12 students chosen from the junior high school years (Grades 7-10/12-16 year-olds) became known as the Student Knowledge Creators Team (SKCT). A purposive sample was selected according to criteria determined by the staff and students from the earlier study (Groundwater-Smith & Needham, 2011); criteria included perceived commitment to the school, study, and reliability (this limitation will also be discussed in a latter section of the article as it is important to assess what it means when selection processes are governed by teachers).

Design and Method

Study Design

Research is available on how school students use digital technology to conduct small-scale inquiries involving peers in education contexts (Czerniawski & Kidd, 2011; Mayes & Groundwater-Smith, 2013). The "mosaic" process developed by Clark and Moss (2001) is one approach to participative research with young people (p. 7). Artifacts produced by this method are not necessarily ends in themselves, rather "they provide prompts for conversations which, in turn, lead to reflection, interpretation and further discussion about potential changes" (Groundwater-Smith, 2015, p. 68). The "mosaic" process adopted in

this study is illustrated through design components in the workshop such as the gathering of artifacts using digital technology and the responses from peers in the SKCT-led focus groups. Here, they used digitally captured images of key people and places in the school that were synonymous with their beliefs about 'what makes a good school'; the photographs provoked discussion in the workshop prior to data collection in the SKCT-led focus groups.

The research design had three stages. The first stage was a three-hour SKCT workshop conducted by the AP. This session comprised transmission and experimentation with simple research and data-gathering skills, including use of digital images, brainstorming and data collection, question construction, focus group protocols and developing question routes, confidentiality in research, and data analysis using dominant themes (Miles & Huberman, 1994). The AP drew on suitable research training principles developed for pre-service teachers in university coursework. The workshop had seven components:

1. A brief introduction to how education researchers conduct research in schools, including discussion on "What is a knowledge creator?" and short YouTube videos featuring students as researchers.[1]

2. An ice-breaker activity using images from the Internet to consider the question: "What makes a good school?"

3. A product-making component using various software applications (for example, Chatterpix, PicCollage, and VoiceRecord) to capture ideas of what makes a good school.

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[1] See https://www.youtube.com/watch?v=b9BETyiikUU.

4. Demonstration and discussion of the focus group as a modeled technique, the process of making questioning strategies explicit, and ethical issues in data collection together with how to set up a Google form with questions.

5. A speed debating session (comprising one- to two-minute rotating debates) on how to effectively collect data from students in focus groups.

6. Simple data analysis techniques using an Excel spreadsheet.

7. Preparation and construction of an agreed question route using the Padlet application to gather ideas and refining a list of focus group questions.

It should be noted that no formal evaluation of the workshop was conducted, and this too is a study limitation. However, a short debriefing session was held. The SKCT were asked to write down their reflections on the experience of both the workshop and the collection of data from peers. Students' technology skills were not measured before and after the study concluded. The research was approved by the school principal as part of a much wider program of school improvement. All relevant ethical permissions were provided and agreed to by staff, students, and parents. The school and students have pseudonyms; no parents were involved in data reported here.

Method

As a qualitative study, the second stage of the co-inquiry involved the SKCT-led focus groups with 88 peers (approximately a 25% of the total junior high school population). Eleven focus groups (amounting to a total time of six

hours) were conducted over one day in the school library. Each focus group compromised seven to eight students and three members of the SKCT; one asked questions, one kept time, and another recorded responses.

Technology access and slow Internet speed in the library prevented access to the Google forms that were created in the workshop, so responses were recorded by the SKCT using pen and paper. The AP was on hand but remained outside the rooms in the library where the focus groups took place. Throughout the study the AP kept extensive field memos and observations of the SKCT in action.

The third stage involved analysis of focus group data by two members of the SKCT with support from the AP. It used an iterative, grounded theory approach (Miles & Huberman, 1994; Strauss & Corbin, 1990) and frequent responses were recorded in an Excel spreadsheet that were collated into themes and converted to percentages. This stage involved two students from the SKCT. Fewer responses were noted in focus groups later in the day, possibly a reflection of minor disruptions from students. Even so, there were a number of lengthy responses spread across the total data set.

Triangulation of the data collected was achieved through analysis of field notes/memos and from observations made over the research period. Data were member checked by two members of the SKCT.

Findings

Results from this small-scale inquiry are presented in two sections. The first section responds to the question of "What makes a good school?" and how a group of students acting as knowledge creators gathered data on what might improve their school. The second section relates to the role of digital technology, and how basic technology and research skills learned in a workshop supported members of a SKCT to have their voices heard. Verbatim comments from the data are embedded in the presentation of findings, below.

In Section 1 the inductive findings emerged from frequently occurring themes that are grouped into five sub-headings for reader ease: improving the experience of school and "making it good"; classroom pedagogy and digital technology; feeling safe at school; respect for cultural differences; and safe, respectful learners.

Section 1

Improving the experience of school and "making it good." Strong themes of what defined a good school emerged; ideas were dominated by references to the school's physical environment. Deemed essential were "a clean school," "tidy school grounds," access to "adequate water fountains," and "nice furniture" in classrooms. Improvements in academic experience could come through "more school excursions," "greater access to Wi-Fi," "digital technology," and "sporting equipment." Also charted were requests for "better Internet connections," "greater access to laptops," and "interactive whiteboards" in all classrooms. Less important were the operational functions, for instance, "a good canteen."

References to the school canteen were recurring, however, and themes identified that a majority of students wanted better food available for purchase. This was followed by concerns that "repairs to the school playground" and "upgrades to heaters and fans in classrooms" should become priorities.

Another repeated theme was how changing the social nature of this boys' school might be affected by "the enrollment of girls," some students believed such ideas could have positive impacts. The merits or otherwise of wearing school uniform was also popular; alternatives revolved around being able to wear a "t-shirt," or a "polo shirt" and "track pants." Other less common responses included "painting the basketball court," "fixing broken concrete" around the school, "laying artificial grass for bin soccer," repairing the "toilet doors," and "installing air conditioning in more classrooms."

Classroom pedagogy and digital technology. A significant theme from the data analysis was the perception of engagement and that learning at the school "was not fun." The majority praised their teachers and believed their relationships were productive; one student gave a lengthy response and had specific expectations: "We want teachers to take firmer control in the classroom as kids disrupt the flow of the lesson, they swear and we can't get our work done."

Frequent requests were made for "more interactivity" in lessons, for example: "More practical and hands-on lessons and extra school excursions—I really want that." Students' access to digital technology was a common complaint across school subjects, with more than half of the responses citing

"faster Internet" and the "unblocking of websites like YouTube" as significant

issues.

Feeling safe at school. Approximately 50% of responses concerned feeling

"safe at school." This was followed up with practical solutions for "greater in-

school security." Specific mention was made of the installation of "metal

detectors" and "security cameras." These responses need to be seen in context

and the timing of the study, which was taking place during a period of heightened

media attention on the school.

Respect for cultural differences. Another recurring theme was for "students to

show greater respect for each other's cultures." Solutions were offered to

address these concerns, for example, "guest speakers to share various cultural

practices on a more regular basis to the school community."

Safe respectful learners. Dominant themes of "freedom," "multicultural,"

"brotherhood," and "friendly" were associated with "Safe Respectful Learners" on

the school's banner. While more than 66% of students felt the words needed to

be replaced, none suggested any alternatives in their responses.

 Section 2

        The main focus was about understanding the role of digital technology and

how it supported or hindered students having their voices heard.

The role of digital technology. Digital technology supported student voice

primarily through participation and the learning of basic research techniques in

the workshop. Field summaries recorded numerous positive and negative observations both during the workshop and on the focus group day in the library (For example, "We really like finding out what other students think." Others noted: "Using the voice-recording applications shown in the workshop would have been better in the library because it did not rely on the Internet and writing down every written response when it was more than 'yes' or 'no' was hard.")

Having their voices heard. Unsolicited comments to the AP from two members of the SKCT shows how they recognized the importance of creating a public space for their voices: "Can we do this again soon, our teachers are listening" (email from Imran), and "It was great finding out how to do education research and make our school better" (email from Trent). The SCKT articulated the usefulness of collecting data as evidence—they were disappointed they could not access the Google forms as having to use pen and paper to carry out the task was: "Onerous." Technology is not always reliable.

Each response from the SKCT in the reflective exercise at the end of the data collection day expressed positive experiences about the workshop and the use of technology more generally at school; this was evident in findings in Section 1. Typical comments were: "Being able to use technology in the workshop was a bonus" (Khan, Year 7); "Displaying visual images of our ideas using various software applications like PicCollage and Chatterpix meant we could express what important to us" (Michael, Year 8), and "If someone records what is said on an iPad then it has more impact than our Student Representative Council" (Will, Year 9).

Discussion

Powerful suggestions for improving school were made in the study. Predominantly the recommendations involved the upgrading of play areas, whether school uniform should be worn, feeling safer at school, and the quality of canteen food. Some of these areas of concern reflect fundamental needs of human beings that Maslow (1943) identified quite some time ago. As well, there were requests for more practical, hands-on lessons and greater interactivity in classrooms. Such ideas fit with what is understood about how young people like to learn (Hunter, 2015, 2017; Facer, 2011; Fullan & Langworthy, 2014).

The findings align with what is reported in education literature on the importance of digital technology in the lives of young people (Groundwater-Smith, 2017; Robinson & Aronica, 2015). Such evidence is particularly significant for these students at GHS, which has a long history of involvement in regular and genuine participation of young people in its operations (Hunter, 2011; Groundwater-Smith & Needham, 2011; Groundwater-Smith, 2015). The school has limited resources, and the economic backgrounds of many of the students' means that purchasing their own digital devices is not realistic. The provision of digital technology by schools is critical because the 'digital divide' means poor communities fall behind in their ability to give high school students equitable access (Jackson et al., 2008; OECD, 2016; Ward & Parr, 2011).

Skills development in rudimentary research processes in the workshop using digital technology was effective. Various visual software applications were

useful for the creative representations of "what makes a school." Group processes fostered collaborative endeavor, and brainstorming ideas for the question route using a form application for the focus groups gave voice to the student ideas and concerns. Efficiencies were noted in the completion of the planned workshop activities when students gathered digital images autonomously, and then created a product to share with others. The SKCT presented and explained their digital artifact to the whole group, which notably gave a sense of ownership and responsibility. With hindsight, it would have been useful to gain some in-depth understanding of the students' digital skills prior to the workshop and then to ask for some self-assessment of those skills at the conclusion of the study.

Findings of this study align with Fielding's (2011) notion of "students as knowledge creators" and fulfill what he describes as "the desire for education to provide real action for democratic fellowship" (p. 65). The real action came through the collective voice of students' ideas for addressing the physical, social, and financial resources impacting on their current experience of school. Their voices came to the fore as a leadership opportunity that was not just about recording ideas/views of peers. A sense of agency emerged in spite of some of the study's limitations.

Time constraints impinged on the study, and the selection of the participants was not democratic in that they were chosen according to a set of teacher-determined criteria. With hindsight, this action was more about expediency. Involving all members of the SKCT team in the analysis phase

would have been valuable. Although positive, final reflections of the SKCT could have been interrogated more, particularly since it was a study designed to understand what mattered to them and the use of technology in fostering student voice. Should the study be repeated a key component would involve negotiating the criteria and selection of the SKCT. Such processes could be improved through, for example, distribution of a simple of expression of interest (EOI) where students select who conducts the exercise. A timely reminder from Fielding (2011) is relevant: "What was learned has the potential to deepen relationships and gradually inform and extend the understandings that emerge" (p. 72).

Conclusion

In this study, a team of "knowledge creators" in a high school setting engaged with digital technology in a small-scale inquiry that included learning skills and processes needed to build research techniques to gather data from their peers about improving school. Each member of the SKCT understood what they were required to do and used newly acquired research skills with enthusiasm and ethical care in conducting focus groups with peers.

The study provides evidence of what a group of students believe "makes a good school." In answering various questions that mattered to them they shed light on what they wanted changed or upgraded. Such democratic processes serve and continue to serve as catalysts for planning further improvements to their school. Outcomes of the research are significant because, after

experiencing undue media attention for several reasons, the school itself determined the design of the study in consultation with the academic partner, the school executive, staff, students, and parents.

Findings of this study were followed up by the school executive promptly and were presented by the SKCT to staff and parents at a special meeting. This "knowledge creation" work continues to inform the operation of the school; indeed, there has already been action on several outcomes and more are planned. When given the opportunity to voice publicly "what makes a good school" high school students can take a leading role. Raising awareness of issues such as the learning environment, physical spaces both inside and outside buildings, quality of food in the canteen, and the desire for more engagement in classroom learning through better access to digital technology are very powerful for young people.

Drawn toward digital technology as a motivational force in learning and daily activity, adolescents require frequent opportunities to use it effectively and with agency as informed digital citizens (Evers & Kneber, 2016; Hunter, 2015). At high school, students are not often given opportunities to participate equally in decisions that affect them (Groundwater-Smith & Mockler, 2016). Digital technology and its implications for pedagogy in student learning and gaining simple research techniques are important life skills for all students, and using it to demonstrate and practice leadership is a logical next step. The inclusion of digital technology in future student voice research activity in high schools also provides real opportunities for other modes of documentation and artifact

collection, including filmmaking, animation, and podcasting. For students who attend less well-funded schools were resources are scant, access to and acquiring proficiency in digital technology are critical (Hunter, 2017).

This study demonstrates that while digital technology has value in developing the skills of student researchers, its applicability in formal workshop settings within schools needs further study. The introduction of digital media groups in schools whose sole focus is student voice research led by a committed teacher presents a real possibility for education for "democratic fellowship" (Fielding, 2011, p. 73). At GHS student voice now forms a key tenet of the school's ongoing operation. The limited number of digital technologies explored here represents just a few of the many tools and applications available for participatory research methods involving adolescents. With time, more high school teachers, leaders, and education systems—including academics in pre-service teacher education more broadly—can use it to empower, motivate, and enhance deeper consultations involving young people.

Discussion questions

- How have students in schools you know or have worked with used digital technologies to have their voices heard in small-scale studies?
- What are the most effective co-inquiries with young people you have participated in and what was it that made them effective?
- If challenges arose in the research how were they addressed both by the students and teachers/school leaders?

- Is mobilizing the *voices of young people* in school decision making even

  more important in 2018 than it has been in the past? Discuss.

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References

Beetham, H., & Sharpe, R. (Eds.). (2013). *Rethinking pedagogy for a digital age: Designing and delivering e-learning*. New York, NY: Routledge.

Birkett, D. (2001, June 5). The school we'd like. *The Guardian*. Retrieved from https://www.theguardian.com/education/2001/jun/05/schools.uk7

Bland, D., & Atweh, B. (2007), Students as researchers: Engaging students'

   voices in PAR. *Educational Action Research*, *15*, 337-349.

Boss, S. (2012). *Bringing innovation to school: Empowering students to thrive in

   a changing world*. Bloomington, IN: Solution Tree Press.

Boss, S., & Krauss, J. (2014). *Reinventing project-based learning: Your field

   guide to real world projects in a digital age*. Eugene, OR: International

   Society for Technology in Education.

Clark, A. (2010). Young children as protagonists and the role of participatory,

   visual methods in engaging multiple perspectives. *American Journal of

   Community Psychology*, *46*, 115-123.

Clark, A., & Moss, P. (2001). *Listening to young children: The mosaic approach*.

   London, UK: National Children's Bureau.

Cook-Sather, A. (2006). Sound, presence, and power: Exploring "student voice"

   in educational research and reform. *Curriculum Inquiry*, *36*, 359-390.

Czerniawski, G., & Kidd, W. (Eds.). (2011). *The student voice handbook:

   Bridging the academic/practitioner divide.* Bingley, UK: Emerald.

Davis, J. M., & Hill, M. (2006). Introduction. In E. K. M. Tisdall, J. M. Davis, M.

   Hill, & A. Prout (Eds.), *Children, young people and social inclusion:

   Participation for what?* (pp. 1-22). Bristol, UK: Policy Press.

Duke, N. K., Halvorsen, A.-L., & Strachan, S. L. (2016). Project-based learning

    not just for STEM anymore. *PhiDelta Kappan*, *98*(1), 14-19.

Evers, J., & Kneyber, R. (Eds). (2016). *Flip the system: Changing education from*

    the ground up. Abingdon, UK: Routledge.

Facer, K. (2011). *Learning futures: Education, technology and social change*.

    London, UK: Routledge.

Fielding, M. (2001). Beyond the rhetoric of student voice: New departures or new

    constraints in the transformation of 21st century schooling? *Forum*, *43*,

    100-112.

Fielding, M. (2004). Transformative approaches to student voice: Theoretical

    underpinnings, recalcitrant realities. *British Education Research Journal*,

    30, 295-311.

Fielding, M. (2011). Patterns of partnership: Student voice, intergenerational

    learning and democratic fellowship. In N. Mockler & J. Sachs (Eds.),

    Rethinking educational practice through reflexive inquiry: Essays in

    honour of Susan Groundwater-Smith (pp. 61-75). New York, NY: Springer.

Flutter, J., & Rudduck. J. (2004). *Consulting pupils: What's in it for schools?*

    London, UK: Routledge.

Fullan, M., & Langworthy, M. (2014). *A rich seam: How new pedagogies find*

    deep learning. London, UK: Pearson.

Gibbes, R. (2014, October). *Teachers connecting with students through games*.

Paper presented at the Australian Computers in Education Conference,

Adelaide, Australia. Retrieved from

https://dern.acer.edu.au/dern/research-reviews/page/teachers-students-

and-digital-games

Gosper, M., Malfoy, J., & McKenzie, J. (2013). Students' experiences and

expectations of technologies: an Australian study designed to inform

planning and development decisions. *Australasian Journal of Educational

Technology*, *29*, 268-282.

Groundwater-Smith, S. (2015). A fair go and student agency in the middle years

classroom. In S. Groundwater-Smith & N. Mockler (Eds.), *Big fish, little

fish: Teaching and learning in the middle years* (pp. 63-76). Melbourne,

Australia: Cambridge University Press.

Groundwater-Smith, S. (2017). *From practice to praxis: A reflective turn: The

selected works of Susan Groundwater-Smith*. London, UK: Routledge.

Groundwater-Smith, S., & Downes, T. (1999, November). *Students: From

informants to co-researchers*. Paper presented at the Australian

Association for Research in Education Annual Conference, Melbourne,

Australia. Retrieved from https://www.aare.edu.au/publications-

database.php/2421/students-from-informants-to-co-researchers

Groundwater-Smith, S. & Mockler, N. (2009). *Teacher professional learning in an*

age of compliance: Mind the gap. Rotterdam, The Netherlands: Springer.

Groundwater-Smith, S., & Mockler, N. (2016). From data source to co-

researchers? Tracing the shift from "student voice" to student-teacher

partnerships. *Education Action Research*, *24*, 159-176.

Groundwater-Smith, S., & Needham, K. (2011). *GBHS: What do they think? A*

consultation with parents and students regarding teaching & learning.

Commissioned paper: Sydney.

Hunter, J. (2015). *Technology integration and High Possibility Classrooms:*

Building from TPACK. New York, NY: Routledge.

Hunter, J. (2017). High Possibility Classrooms as a pedagogical framework for

technology integration in classrooms: an inquiry in two Australian

secondary schools. *Technology, Pedagogy and Education*, *5*, 559-571.

doi:10.1080/1475939X.2017.1359663

Hunter, J., & Mitchell, J. (2011). The insider and outsider model of professional

learning. In N. Mockler & J. Sachs (Eds.), *Rethinking educational practice*

through reflexive inquiry (pp. 183-196). New York, NY: Springer.

Ito, M., Gutiérrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., …

Watkins, S. C. (2013). *Connected learning: An agenda for research and*

design. Retrieved from Digital Media and Research Hub Web site:

http://dmlhub.net/sites/default/files/Connected_Learning_report.pdf

Jackson, L. A., Zhao, Y., Kolenic, A., III, Fitzgerald, H. E., Harold, R., & Von Eye,

    A. (2008). Race, gender and information technology use: The digital

    divide. *CyberPsychology & Behavior*, *11*, 437-442.

Kearney, M. D., & Schuck, S. R. (2006). Spotlight on authentic learning: Student-

    developed digital video projects. *Australasian Journal of Educational*

    Technology, *22*, 189-208.

Larmer, J., Mergendoller, J., & Boss, S. (2015). *Setting the standard for project-*

    based learning: A proven approach to rigorous classroom instruction.

    Alexandria, VA: ASCD.

Manca, S., & Grion, V. (2017). Engaging students in school participatory practice

    through Facebook: The story of a failure. *British Journal of Educational*

    Technology, *48*, 1153-1163.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*,

    370-396.

Mayes, E., & Groundwater-Smith, S. (2013). Performing alternative positions:

    Student voice, reflection and reform. In V. Grion & A. Cook-Sather (Eds.),

    Joining the movement: Bringing student voice to educational theory and

    practice in Italy (pp. 193-211). Milan, Italy: Guerini.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded*

    sourcebook. Thousand Oaks, CA: Sage.

Mitra, D. (2003). Student voice in school reform: reframing student-teacher

relationships. *McGill Journal of Education*, *38*, 289-304. Retrieved from

mje.mcgill.ca/article/viewFile/8686/6629

OECD. (2016). *Education at a glance 2016: OECD Indicators*. Paris, France:

Author.

Pink, S. (Ed.). (2012). *Advances in visual methodology*. London, UK: Sage.

Redecker, C. (2014). The future of learning is lifelong, lifewide and open. In N. J.

Jackson & J. Willis (Eds*.*), *Lifewide learning & education in universities

and colleges* (pp. 1-9). Retrieved from Lifewide Education Web site:

http://www.learninglives.co.uk/e-book.html

Robinson, K., & Aronica, L. (2015). *Creative schools: The grassroots revolution

that's transforming education*. New York, NY: Viking.

Rudduck, J., & Flutter, J. (2004). *How to improve your school: Giving pupils a

voice* (1st ed.). London, UK: Continuum.

Rudduck, J., & McIntyre, D. (2007). *Improving learning through consulting pupils*.

London, UK: Routledge.

Savin-Baden, M., & Tombs, T. (2017). *Research methods for education in a

digital age*. London, UK: Bloomsbury.

Seale, J. (2009). Doing student voice work in higher education: An exploration of the value of participatory methods. *British Educational Research Journal*, *36*, 995-1015.

Sellar, S. (2015). A feel for numbers: affect, data and education policy. *Critical Studies in Education*, *56*, 131-146.

Selwyn, N. (2014). *Distrusting educational technology: Changing questions for changing times.* New York, NY: Routledge.

Simmons, C., Graham, A., & Thomas, N. (2015). Imagining an ideal school for wellbeing: Locating student voice. *Journal of Educational Change, 16*, 129-144.

Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory, procedures and techniques.* Newbury Park, CA: Sage.

Ward, L., & Parr, J. M. (2011). Digitalising our schools: Clarity and coherence in policy. *Australian Journal of Educational Technology*, *27*, 326-342.

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