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Reading for digital futures: a lens to consider social justice issues in student literacy experiences in the digital age

Laura Scholes

Institute of Learning Sciences and Teacher Education, Australian Catholic University, Brisbane, Australia

ABSTRACT

Acceleration of digital communication has changed the nature of reading and young people today need to engage multimodal skills for reading success in the digital world. While historically there have been social justice issues for marginalised students in terms of reading, the digital age is creating new equity issues across the globe. This article draws on Nancy Fraser's social justice framework to explore Year 3 student ($n = 318$) beliefs about the value of reading, their reading practices and their opportunities for developing digital reading skills. Findings illustrate that students believe that reading is a valuable skill – however a surprising finding was the focus on reading to secure a good job. Of concern, the students' situatedness and personal reading experiences did not necessarily prepare them for success as readers or offer the resources required to transition into the careers to which they aspired.

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Introduction

The acceleration of digital communication has changed the nature of reading (Burnett & Merchant, 2021; Coiro, 2021; Leu et al., 2015; Scholes et al., 2023). This shift means young people today need to learn how to engage sophisticated multimodal decoding skills for reading success in the digital world (Burnett & Merchant, 2021; Mills et al., 2022; Scholes, 2022). Repertoires of digital practices are now required (Sefton-Green & Erstad, 2017), as shifts from print-based reading to digital forms of decoding, comprehension and learning involve very different material experiences in how we engage the body and mind (Scholes, 2022). In this way, the advent of digital communication has expanded the skills students need to be taught in literacy classrooms to engage with digital interactive multimodal texts (Mills, 2010; Mills et al., 2022), but they also need access to digital resources at home and in schools to support their learning (Leu et al., 2015; Scholes et al., 2023).

While historically there have been social justice issues for marginalised students and gaps in reading achievement across nations on international benchmarks such as PILS and PISA, the digital age is creating new equity issues for students across the globe (Scholes, 2020; Warschauer & Tate, 2018; World Economic Forum,

CONTACT Laura Scholes Laura.scholes@acu.edu.au Institute of Learning Sciences and Teacher Education, Australian Catholic University, Level 4, 229 Elizabeth Street, Brisbane, Qld 4000 Australia

2021). As reading practices diversify due to emerging technologies, there is a need to recalibrate what constitutes texts and how new modes of communication impact on student experiences and opportunities for success (Burnett et al., 2020; Coiro, 2021; Kirschner & Bruyckere, 2017). Proficiencies are required to read online and engage with digital gaming texts, multimedia websites, interactive graphics, e-books, digital e-readers such as Kobo and Amazon Kindle and social media platforms (Barzillai et al., 2018; Furenes et al., 2021).

These digital spaces provide many opportunities and benefits, including rapid and expanded access to knowledge and information, but such engagement also demands experiences with digital platforms, new multimodal skills with such practices requiring a recalibration of the nature of reading (Coiro, 2021; Scholes, 2022; Scholes et al., 2023). When reading is conceptualised to include immersive digital multimodal experiences (Jenkins et al., 2016; Keogh, 2018), the accelerated growth in technologies in the past five years provokes questions about new inequalities that arise for students.

The problem is there is an escalating digital reading gap – exacerbated by variables related to socioeconomic status (SES) – by the time young people progress into adolescence with a need to address this issue in schools (Leu et al., 2015; Ren et al., 2022). Historically, there has been a gender achievement gap related to reading, with boys underperforming compared to girls (OECD, 2015; Scholes et al., 2020). Of concern, there is now an increasing digital reading achievement gap mediated by access to digital access at home and in schools (Leu et al., 2015). Fragmented access and opportunities denote a widening gap between the have and have-nots in terms of equity across the globe (Kirschner & Brychkere, 2017; Warschauer & Tate, 2018; World Economic Forum, 2021).

Students from economically marginalised communities can be subject to more limited literacy curriculum and pedagogies that focus on transmission of knowledge, with lower expectations and deficit views about student literacies from an early age (Comber, 2015; Hempel-Jorgensen et al., 2018; Scholes, 2019b). However, they can now be subject to compelling equity issues related to digital access and lack of appropriate reading experiences to prepare them for digital particiation (Leu et al., 2015). In this way, the digital age is creating new equity issues and reifying reading's position as a class-based practice (Freebody, 1992; Gaddis, 2013).

In this article I understand literacy as social practice (Street, 1998) and focus on how technologies interplay with everyday student literacy practices with dual intentions. On one level, the article reports empirical data about young student beliefs about, and experiences as, readers, as it highlights survey and interview data from 318 students (aged 8–9) from 14 economically diverse school communities. Student responses point to a multiplicity of interrelated experiences that impact on readers in the digital age. On a second conceptual level, the article offers a resource for disrupting taken-for-granted assumptions that may be held by educators, policymakers, and broader society related to student literacy experiences. That is, this article draws on student data to explore how Fraser's (2007, 2008) social justice theory provides a useful lens to explore the diverse cohort of students' experiences as readers in the digital age.

Reading practices in the digital age

As the twenty-first century began, we had not yet conceived of the internet and the world wide web; we had not heard of TikTok, YouTube, Facebook, Twitter, Twitch, Reddit or Zoom. Social media – or virtual social networking sites that provide technosocial environments for young people – were absent and concepts such as the 'selfie' and 'influencers' were not even conceivable. Now part of everyday life, digital platforms are important spaces for learning, keeping up to date with information, communicating and networking with others (Mills et al., 2022; Scholes, 2022).

Amidst the 2020 health pandemic, the world embraced digital transformation at an expedited pace, reimagining technology's critical role in communication (World Economic Forum, 2021). In the wake of the global health pandemic, there has been a greater reliance on digital technologies in education and everyday life across the globe (Lin & Johnson, 2021; World Economic Forum, 2021). Due to the escalation of technologies, young people now need a broad range of dynamic digital multimodal reading skills to decode across a range of technologies to succeed in school (Mills et al., 2022). Such digital text reading practices are now critical for student participation, lifelong learning and job prospects to successfully transition into digital society (Lin & Johnson, 2021; OECD, 2020).

To develop digital reading proficiencies, students require experiences with digital texts across platforms – which in turn demand high-level digital resourcing. This includes sufficient bandwidth to support digital practices, access to high-functioning computers, iPads or smart phones and the development of skills to access dynamic 'texts' that require complex decoding practices (Burnett & Merchant, 2021). For instance, digital gaming provides opportunities for reading integrated multimodal digital texts that include creative combinations of text, hypertext, sound and images, reframing links between decoding, texts and tech (Beavis, 2014; Beavis et al., 2017; Burnett & Merchant, 2021). Gaming texts fundamentally change the reading experience, with a complete sensory immersion, a convergence between the player and the game in a virtual world, or 'embodiment' in and as the text (Keogh, 2018). To 'read' game texts requires skill to integrate words, images, graphics, gestural and aural modes, but also to interpret contextual information.

With the biggest gaming trends in 2022 including AI, virtual and augmented reality, blockchain and the metaverse, there is an acceleration in embodied experiences needed to engage in highly sophisticated digital spaces (Mills et al., 2022). These distinctive digital multimodal integrative literacies have application to other contemporary digital literacy contexts in English (e.g. reading websites, eBooks and searching for information on the world wide web). Such multimodal reading practices are now essential skills for reading to learn in many classrooms post-COVID and for upward mobility in the digital world (Warschauer & Tate, 2018, World Economic Forum, 2021).

Reading as the gateway to success in the digital era

Digital economies and cultures rely upon sophisticated discourses and texts for modes of communication, education, leisure, transition into the workplace and everyday exchanges. Which individuals have access to complex multimodal skills, who can decode,

comprehend and evaluate digital texts, is key to education and contemporary social justice issues for marginalised students. Not all digital texts have the same cultural, educational or transformative power. For instance, having access to digital texts such as TikTok does not naturally articulate into abilities to read, synthesise and evaluate complex socio-scientific information on the internet that offers multiple perspectives and viewpoints on a range of socially relevant topics, such as health pandemics, climate change and genetic testing. In such spaces contradictory sources, misinformation (false), disinformation (misunderstood), and advocacy for competing theories abound (Mills et al., 2022; Scholes et al., 2023).

A core 'post-truth' educational challenge is how to teach the critical and deep reading skills needed as students move from stable, linear texts to non-stable modalities found on platforms such as the internet and offer almost endless amounts of conflicting information (Barzillai et al., 2018; Golan et al., 2018). This requires shifts in attention, decision-making and complex cognition to navigate personal reading pathways through hyper-linked spaces that require processes to plan, focus attention, remember instructions and juggle multiple tasks successfully to filter distractions, prioritise tasks, set and achieve goals and control impulses (Golan et al., 2018; Singer & Alexander, 2017). While students are not born with these skills, they have the potential to develop them if they are offered relevant resources, pedagogies and learning experiences. Increasingly these digital multi-modal skills are essential for life-relevant inclusion to learn, communicate, work and become an active citizen in digital society (OECD 2020, 2022).

Application of Fraser's social justice lens to understand reading in the digital age

To explore the complexities that impact on student reading experience at school in the digital age, I draw on the social justice theory proposed by Nancy Fraser (2013) to understand how young people's situated social conditions may promote or impede their digital reading practices. I use Fraser's theoretical lens for thinking about how young people's opportunities for 'parity of participation' (Fraser, 2007) may be challenged due to technological and economic changes that result in obstacles to becoming a successful reader in the twenty-first century. Fraser (2007, 2008) offers a view of social justice concerned with 'parity of participation' through a lens that considers the inter-related and over-lapping concepts of recognition and redistribution. While these are two separate concepts they are interrelated. Fraser explains that transformative remedies are needed for disrupting inequitable institutional arrangements within these domains.

Drawing on Fraser's (2007) framework involves the concept of *recognition* – defined as a question of social status. From this perspective, what requires recognition is not group-specific identity but the status of group members and how they can be peers in digital life, with misrecognition or devaluing of some literacy practices preventing young people from equal participation and opportunities for education success. In our current technology-driven society, digital proficiencies increasingly have cultural value, with some students attaining required norms and others deficient. Misrecognition can extend to the communication practices used by some students, between themselves and with significant others, literacy practices valued in their various youth cultures (e.g. digital games as

texts, online leisure reading) and their authentic reading diversity (e.g. recalibrating what constitutes reading).

Reading has always been a class-based practice (Freebody, 1992; Gaddis, 2013). But there is now a need to recalibrate what is means to 'read' via computer-mediated platforms and understand what practices constitute proficiency and which students have currency. This requires a close look at the reading practices necessary, but also the practices of youth in their out-of-school lives and how they translate, or not, to culturally valued proficiencies. It may well be that recognition of the out-of-school practices of many young people today do not align with traditional definitions of reading and traditional cultural value. This means valuing student home literacy practices and literacies that reflect their youth cultures. Recognition struggles are influenced by increasing transcultural interaction and communication, when accelerated migration and global media flows hybridising and pluralising cultural forms (Fraser, 2007). Struggles for recognition are often inter-related with struggles for redistribution of resources.

In terms of Fraser's (2007) framework, the concept of *redistribution* aligns with socioeconomic injustice, which is rooted in the political-economic structure of society. This could be associated with economic marginalisation based on student living conditions and the school community they are part of, and if they are denied an adequate educational experience. In our current society, to understand young people and reading in the digital age this would mean investigating student access to material resources that include hardware, software and bandwidth, and which schools are well set up with the most current technologies for teaching (including gaming, virtual reality equipment and so on). This also means considering student access at home and at school to a rich range of digital texts, e-books, apps and the internet.

It is useful to consider that Fraser argues for *redistribution* and points out that there has been a relative decline in claims for egalitarian redistribution. This decline may have been fuelled by myths around meritocracy and beliefs that anyone with skill and imagination can aspire and reach the highest levels with social mobility and equal opportunity for all. While admirable, social structure continues to firmly entrench inequalities based around economic resources and related experiences (Reay, 2013). More recent shifts towards advancing class mobility have focused on meritocracy (Mijs & Savage, 2020), with the aim of diversifying the social hierarchy to empower the talented, intelligent and those with ability to rise to the top – to ensure representation of deserving individuals from underrepresented groups (Fraser 2013). The formation of aspirations and success is then conceived as a matter of individual choice and rhetoric of personal autonomy (Reay, 2013; Skeggs, 1997), with disregard for how individual pathways are formed in the 'thick of social life' in an inequitable system (Appadurai, 2004, p. 67).

From Fraser's perspective (2007), distributive justice would mean more equitable distribution of resources related to reading in the digital age, while *recognition* justice would acknowledge differences between social identities and groups and their practices. For instance, recent research (Scholes et al., 2022) shows boys from lower socioeconomic communities engage with digital gaming more regularly than their more affluent counterparts and girls. This higher frequency of play is also aligned with higher levels of self-efficacy with digital technologies, however there is little recognition of this social practice

in schools or pedagogical approaches that extend to digital gaming texts in English classrooms (Nash & Brady, 2022).

Many boys from lower socioeconomic homes can now access gaming via smart phones, iPads or home computers without the need for expensive gaming consoles, making such play more accessible. However, these same boys may attend schools with lower levels of resourcing, computer, internet and digital literacy support due to their economic location. To view recognition as a matter of valuing particular practices and to understand one's status means examining institutionalised patterns of cultural value for their effects on the relative standing of young people and the resources available. Recognition means educators recognise the levels of resourcing in students' homes and the communication practices used by the students between themselves and significant others, as well as the literacy practices valued in their various lifeworlds.

Fraser's framework has utility for considering how teachers in diverse communities can broaden digital reading experiences by considering the situated entanglement of the distribution of resources with recognition. Drawing on a framework that can be contextually situated can make visible patterns that constrain experiences for some students and may empower practitioners to make curriculum and pedagogic choices that allow greater participation in reading experiences. (For further elaboration see Scholes, 2020). In this way, educational policies can be informed by local representation (e.g. reworking policies with input from local stakeholders to redistribute resources and with recognition of diverse student bodies).

Materials and methods

This article draws on data from a large-scale mixed-methods study of student experiences of schooling (deidentified). In this article, I draw on one slice of the data to explore Year 3 and Year 4 student (8 to 10 year olds) beliefs about reading, their access to digital reading opportunities, and their perceptions of the importance of reading. To this end, I draw on student responses to survey and interview questions to answer three research questions, namely:

(1) What access do students have to digital devices?
(2) What value do students attach to reading?
(3) How do students describe their reading practices?

The description of the mixed methods utilised to answer these questions are described in the following sections. The methods are divided into two parts for this two-phase research design. First, the phase one survey sampling, survey design and survey analysis are presented. Then the phase two interview methods, including participant selection, interview description and analysis are detailed

Survey sampling

Elementary schools were purposefully selected across Australia to include institutions embedded in a range of geographic locations (inner city, metropolitan, regional), with diverse economic demographics (lower to higher SES communities) and included

Anglican ($n = 1$), Catholic ($n = 2$), and government ($n = 11$) schools. Participants who gave informed consent to take part in the survey included 318 third-grade students (ages 7–8 years old) from 14 schools and included 152 boys and 166 girls.

To identify socio-economic background, schools are allocated an Index of Community Socio-Educational Advantage[1] (ICSEA) score that can range from 500 (extremely disadvantaged community) to 1300 (highly advantaged community). The average ICSEA is 1000 with schools above this score representing above average socio-economic advantage, and schools below this score representing below average socio-economic advantage. In this study schools were allocated scores that ranged from 888 to 1175. The school with the lowest score in this study was situated in a regional township where 65% of students were considered within the bottom quartile of SES disadvantage and included 20% Indigenous and 4% English as Second Language (ESL) students.

In addition, one of the schools with an average level of socio-economic advantage had a high rate of diversity with nearly 40% of the student population coming from language backgrounds other than English (LBOTE), and 6% of students identifying as part of Indigenous communities. A range of languages were spoken in homes including Samoan, Vietnamese, Tagalog, Swahili and Spanish. In this sample, the school with the highest socio-economic level of advantage was located in a metropolitan city with 77% of students in the top quartile of advantage and included 2% Indigenous and 13% ESL students.

Survey design

A pencil and paper questionnaire developed and validated asked students to indicate if they believed that reading was important and why, if their parents thought reading was important and why, along with their frequency of using digital devices (Scholes, 2019a). The questionnaire was facilitated by the researcher and completed with students one-to-one and face-to-face in schools. The students were asked to indicate if they and their parents thought reading was important on a two point scale (yes or no) and to self-report their frequency of using digital devices (iPads, computers, gaming consoles, smart phones and so on) on a five-point scale that ranged from: i) hardly ever; ii) a few times a fortnight; iii) once per week; iv) a few times a week; or v) every day. Classroom teachers indicated student reading levels and school ICSEA scores were also recorded.

Survey analysis

Responses were coded and entered into SPSS. For instance, student responses related to the importance of reading were scores yes = 1, or no = 0. Self-reported frequency using digital devices were coded 5 = every day, 4 = a few times a week, 3 = once per week, 2 = once per two weeks and 1 = hardly ever. Finding then informed the follow-up interview phase. For instance, in the survey students were asked about their self-reported use of digital devices; in the interview, participants were probed to understand their justifications for their responses and to elicit more in-depth understandings.

Table 1. Examples of survey/interview confirmatory coding of the data.

School ICSEA score	Student sex	Survey question	Student survey response	Student interview confirmation of survey response and justification of response
1000	Male	Is reading important?	Yes	Author: Why do you think reading is important? Student justification: Because you do need to read, you have to be able to read to get a job. Because it could get you a good job. And yeah, it could get you a great job.
1113	Female	Do your parents think reading is important?	Yes	Author: Why do your parents think reading is important? Student justification: Because my mum wants me to get a good job and she says to me that the way that I can get a good job is by reading stuff.

Interview sampling

Follow-up interviews took place after the survey using a convenient sample of 45 students across six demographically diverse schools (Lavrakas, 2008). The data represents students who met the criteria for participation, namely, that they completed the survey and had indicated they would like to be involved in a follow-up interview.

Interview design

Participants were individually withdrawn from their classrooms to participate in the semi-structured interview. The first phase involved reviewing the student's survey responses to confirm their answers and to explore if any of their responses had changed. Second, the students were asked to elaborate on their survey responses and give examples to provide justifications for their responses; they were also encouraged to retell narratives related to their experiences. The audio-recorded interviews took approximately 20 minutes and were transcribed at a later date.

Interview analysis

First, the deductive iteration or 'confirmatory' approach (Saldaña, 2021) of analysis involved identifying interview narratives that corresponded with responses identified during the survey analysis. For instance, students were reminded of their self-report

Table 2. Examples of interview inductive coding.

School ICSEA score	Sex	Interview question	Student interview response	Fraser framework
980	Male	You said reading was important for getting a job. Tell me why it is important.	Student: Because a lot of jobs you need to read quite a lot. [Wants to be a gaming YouTuber and has followers on his YouTube channel]. With games you read a lot yeah game cheats, wikis, guides and so, you write the guides in the description sometimes as well. With games there's usually popups like cut scenes you have to read as well.	Student views reading as multimodal and includes gaming texts (need for *recognition* of digital texts and home practices).

using digital devices (e.g. every day, a few times a week, once per week, once per two weeks or hardly ever) and interview questions probed for student elaborations on their response. In this way, the survey response and interview narrative were analysed to provide more in-depth understanding and as a confirmatory approach. Table 1, for instance, illustrates examples of survey question responses juxtaposed to survey interview responses for the same student.

The second inductive iteration considered the qualitative data as a means of exploring more complicated and textured relationships and nuances from Nancy Fraser's social justice lens (Saldaña, 2021). In the inductive coding of the interview, narratives from the Fraser (2007) social justice lens were considered. For instance, illustrated in Table 2, student responses were analysed in terms of the two domains related to the social justice framework (recognition, redistribution).

This iterative analysis process led to the establishment of a coding template which was then applied to the remaining interviews.

Findings

Access to digital devices and distribution of resources

From Fraser's (2008) perspective, social justice relies on the fair division of resources and opportunities in society. In this section I explore the survey and interview data to answer Research Question 1: *What access do students have to digital devices?*

Across the student cohort, 25% ($n = 79$) of students reported having daily access to digital devices, 27% ($n = 85$) a few times a week, 19.5% ($n = 62$) once a week, 6.5% ($n = 21$) once a fortnight and 22% ($n = 71$) of children reported having hardly any access. The low percentage of participants reporting daily access to digital devices, despite the rhetoric of digital natives in popular media, is particularly concerning, as there has been an increase in school initiatives in Australia that require compulsory tablets and laptops in as early as kindergarten or preschool (Selwyn et al., 2017). This finding may reflect the economic contour of the schools' family contexts of the students in the study and subsequently point to issues of access, as the digital divide between the rich and poor is widening (Thomas et al., 2020). Interviews with the students further highlighted the discursive experiences and opportunities available.

For Josie, who attended Parkview Elementary School in a higher SES leafy green middle-class suburb, reading was an important part of her daily routine. She had unlimited access to digital devices and daily engagement with a variety of platforms at home (e.g. smartphone, iPad, laptop, eReader, the internet), offering opportunities to develop digital multimodal reading skills (Mills et al., 2022). Excelling at reading at school, Josie appeared to understand that reading involves proficiencies beyond traditional print and explained reading was important to decode via texts:

> If you couldn't read, then you would have no idea what your grandma was saying to you on her text that she sent.

She also described how reading is beyond books to include code:

> Yes, and not just reading, like you can read a book, but reading would be very important say if a spaceship malfunctioned, then you would have to be able to read the computer codes to fix the problem. But if you couldn't, then you'd probably die, depending on what it was.

In this way, Josie appeared to have a broad view of reading that encompassed digital texts and coding. During the interview Josie explained that reading was vital for getting a good job and proudly described how she wanted to do 'important work' when she grew up because she wanted to 'make a lot of money'. She positioned reading as the gatekeeper to the type of work she aspired to as she wanted 'to get a job flying a plane, so you have to be able to read' and potentially had access to her family's financial capital to support the costs of becoming a commercial pilot. Here we see Josie's daily reading practices reflecting digital transformation and culturally valued modes of reading. With her engrained belief in the value of reading for getting a coveted job, her career aspirations may well be supported due to the economic contours of her household resources.

James, on the other hand lived in a lower SES suburb in transition as working-class families moved further out of the inner-city suburb due to rising housing costs. He wanted to work in computer and information technology when he grew up and clearly understood the link between reading success and workplace trajectories. He explained that if you did not engage in reading practices it could be detrimental to your life chances.

> I think reading makes you smart because pretty much every job you need to learn to read. Like, if, you want just really any job. Probably you're not gonna get that far in life if you don't read.

While James had specific print-based reading interests and was a big fan of Captain Underpants (he had read one book seven times), X-Men and Marvel superhero books, he was having problems getting access to the books he desired. He had read all the books he loved that were available in his classroom and there was stiff competition for popular books in the school library, with limited copies of the books he desired, a problem identified by other boys from lower SES schools with limited resources in their libraries (Scholes, 2020). He did not have access to print or digital texts at home, expressing fragmented opportunities for reading. This may be detrimental in the long run as he aspires to work in computer information technology, but has limited opportunities for developing digital literacy, reflecting an understanding that digital technology is the way of the future, but illustrating he is a fan of something he imagines rather than experiences.

In contrasting the experiences of Josie and James, their narratives highlight how in reality we do not yet live in a fully participatory culture, with ongoing issues of inequality and exclusion for students (Jenkins, Ito & Boyd, 2016). Inequity in digital access at home and at school has implications for students' reading experiences and subsequently situated outcomes for digital participation.

Collective understanding of the value of reading

In this section I explore the survey and interview data to answer Research Question 2: *What value do students attach to reading?*

Despite disparity in access to digital devices, the majority of students across all 14 school sites (92%) reported that reading was vital and offered justifications that linked

this to getting a good job (86%). Students also indicated that their parents believed reading was significant (92%), with interview narratives illustrating how students had appropriated their parents' values. The value attributed to reading was most often aligned to transitioning to the workplace, with students typically relaying that 'my parents want me to be a good reader so when I grow up, I can get a good job' (Amara). For Jackson, who was attending a school in a lower SES school, reading was clearly linked to employment:

> I would say good reading skills would help you get a better job. Because you have to study for most jobs. I want to start off being a professional because then you can get money, you can buy your own house. If you don't read, you won't get a very good job, or have a very good future. (Jackson)

Other examples of responses from students included:

> My parents think being a good reader is important. They just make me read. Because they want to make me smart. Yeah, it makes you smart because it's information. (Jaden)

> Because my mum wants me to get a good job and she says to me that the way that I can get a good job is by reading stuff about it and learning at school. She asks us if we have any library books and then she tells us to get them and read them. (David)

> Since I've got a good brain, they say this. They say I should keep reading so I can get a better brain. When I grow up, I can be smart and probably get a good job. (Cara)

> Yes. Being a good reader is important, My dad always says being a good reader is gonna be important because, say you worked at EB Games, and you were selling this game and you can't read the title of what it's called. (Matt)

Student responses illustrated that reading was valued by their parents, closely connected to workplace aspirations. Similarly, Noah, who wanted to be an NBA basketball player and was attending Figtree Elementary School (lower SES, high cultural diversity), talked about his parents' influence on his beliefs about reading practices. According to Noah:

> My parents think reading is important for me and they think it's just important. Well they think it's important for my brother too, but he doesn't do it very much. They think it's important because they want me to get a pretty good job. Because you'll know a lot and you'll know - well yes, you'll know a lot.

In this way, reading literacy was conceptualised as a gatekeeper to success. However, to pursue further education, high-level reading skills and economic capital may also be necessary for such a trajectory (Luke, 1995; Scholes & McDonald, 2021).

For others, such as Jett from Lavender Lane Elementary School (average SES background), reading was also deemed important for his future work life, as he described both print and digital reading opportunities:

> Reading is important because you can learn stuff and I can get a job when I'm bigger. I read a book every day. Maybe half an hour, an hour, in the afternoon after I get back from school. And sometimes I read on my iPad, play a few games, or maybe read an eBook.

There appeared to be a diversity of daily reading practices that engaged Jett, including opportunities for reading texts on an iPad or an eBook, as he was encultured into both print-based and digital modes of texts. A compelling finding was the strong association between reading skills and desired workplace trajectories – albeit with unequal access and distribution of resources to support such practices.

Recognition of reading practices

In this section I explore the interview data to answer the final research question: how do students describe their reading practices?

In this study, student responses about their reading practices revealed everyday practices that extended beyond the classroom. Many students described their engagement with gaming – one of the world's most popular forms of digital media, characterised by accelerated connectivity, multimodality and connections to a student's cultural practices (Beavis et al., 2017; Burnett & Merchant, 2018) providing substantial cultural capital for players (Molyneux et al. 2015). Examples included references to gaming paratexts (fan-based gaming wikis, game play walk throughs, blogs, game play guides and so on) that contributes to belonging to, and participating in a gaming community (Molyneux et al. 2015; Scholes et al., 2021). For instance:

> I love reading all the game cheats and play my favourite games nearly every day. I have to do a lot of reading to be a good player. (Lincoln)

> My favourites are hairdressing games. Where you get to style them and choose different hair colours and stuff like that. (Dana)

> Well, I like gaming. I do Minecraft and first-person and third-person normally.
> Yeah, I have an Xbox and I sometimes use the iPad. I normally game every day. (Jaxon)

The digital gaming literacies being developed by these students involve the simultaneous construction and manipulation of nonlinear, interactive texts through digital media that learners perform in and out of school settings. Involving the blending of literacy competencies with related paratexts, these skills are not always valued in educational settings (Apperley & Walsh, 2012). While connections between digital games and literacy are increasingly highlighted, the ways multimodal reading practices are integral to partaking in a digital gaming culture often remain invisible for educators (Zinger, Tate & Warschauer, 2018), with diversity in take-up and access in schools.

For instance, there are a growing number of schools involved in eSports – competitive gaming for students through networked schools – that require up-to-date infrastructure and digital literacy skills for students. Keeping up with the latest technologies, games and interactive modes such as virtual and augmented reality are not available for all. Understanding digital multimodal decoding skills requires engagement with new definitions of reading that account for emerging technologies, such as gaming, making situated practices visible (Apperley & Beavis, 2013; Mills, 2010, Molyneux et al. 2015; Qian & Clark, 2016).

For Noah, who was previously noted as wanting to be an NBA basketball player, there were problems accessing a computer at home.

> No. I don't have a computer. It broke so I don't use it anymore. But I don't need a computer for anything, it's just all done on my phone.

While smart phones are providing digital access for many in marginalised communities without access to laptops or iPads, there are limitations in reading opportunities and changes in behaviours, as users tend to engage in more fragmented use (Kumar, Kim & Helmy, 2013). This was not a problem, according to Noah, as he had an Xbox to play NBA games because 'that is my favourite sport' and he has 'an iPad. I go onto apps and I go onto my NBA2K'. He went on to say:

> I secretly download games on the internet. I get onto the internet and watch awesome NBA stuff because I've got the NBA app. Yeah. I've got my own phone and I watch everything through that.

For Noah, his smart phone offered opportunities to connect with the world wide web and engage in media that was embedded his personal experiences – providing experiences with vital digital multimodal literacies he may well need in the future.

Unprecedented numbers of students engage in gaming, offering the potential to foster reading games-as-texts in virtual spaces (Mills et al., 2022; Qian & Clark, 2016; Scholes et al., 2021). From this perspective, immersive gaming literacy experiences facilitate spaces to develop literacy skills as players read, decode texts and comprehend story lines. Such spaces also offer opportunities to shift learning away from the acquisition of facts that are right or wrong, towards constructivist spaces of self-generated ideas that can be tested. Skills developed through game play are highly valued in futures-focused schools, with qualities developed through gaming that are transferable to the workplace (Mills et al., 2022).

As the gaming industry continues its skyrocketing growth in the coming years, and young people engage in increasingly complex and demanding cognitive, linguistic and sociocultural practices generated by game play, the potential of digital games to be normalised in literacy classrooms has important implications for literacy education (Beavis, 2015; Beavis et al., 2017; Gutierrez et al., 2023; Scholes et al., 2022). Developing such literacies, however, requires schools that support the costs of hardware and the speed of data connection needed to support such experiences.

Conclusion

This article aims to contribute to critical discussion in two ways. First, it reports findings from 318 students across broad school demographics to illustrate beliefs about the value of reading. While the students in this study clearly articulate the power of reading particularly for desirable job trajectories, economic marginalising is closely related to their experiences as readers and the risk of unemployment, which is a global issue (OECD, 2020). Students' personal experiences include variable access to digital experiences, diverse reading practices not necessarily valued in classrooms and desired career trajectories that do not necessarily align with their preparation pathways. Of concern, digital exclusion leads to long-term educational marginalisation, but it also leads to social, cultural and health problems, as digital communication becomes integral to all aspects of daily life as we work, communicate, learn, entertain and access information – such that digital exclusion equates to social exclusion (Thomas et al., 2021).

Second, the article offers a social justice approach to disrupt commonly held beliefs about student reading experiences in the classroom and the affordances they are offered in the increasingly digital world. Responding to a conundrum proposed by Luke (1995), how can educators respond when the power, value and efficacy of reading as economic currency may well depend on the availability of other forms of inter-related resources? These resources include embedding a range of new communication skills in learning, facilitating access to evolving technologies and reliable, affordable internet access, to start (Kiili et al., 2020). If social justice is a goal, folklore heralding reading as the key to lifelong success needs to be disrupted to account for shifting modes of contemporary reading that results in fragmented access to online texts and digital experiences in schools and homes (Leu et al., 2015, Ren et al., 2022).

Findings highlight the need for *redistribution* of resources to provide equitable access to digital texts, and, indeed, *recognition* of student reading practices that are part of their everyday social practice (Barton, 2007). *Representation* of students in schools accounts for the paradox in educational agendas that professes to mediate inequality while systematically reifying inequality. From Fraser's (2013) perspective, to dismantle structural barriers we need to work towards parity-fostering alternatives and consider access to desired texts, including multimodal digital spaces. Schools then need to address teaching and learning reading in the digital world as a social justice issue.

The students in this study appeared to believe that proficiency and/or a positive attitude towards reading leads to social mobility and/or success in the job market. In this way there is no room for the embarrassing idea of downward mobility (Payne, 2012). Appropriating reading as a 'silver bullet' for social mobility is no solution to educational inequalities or wider social and economic injustices (Skeggs, 1997). The pressure to do well in literacy for upward mobility in the workplace may actually bring about a sense of deficit for students if one does not better oneself in their lifelong journey through school and into the workforce – and move beyond traditional family backgrounds.

When policymakers see education as solely a means of preparing students for the labour market, and not as an end in itself, it is inherently problematic (Reay, 2012; Sefton-Green & Erstad, 2017). Economic disadvantage seeps into education systems, creating divisions between people, places and educational experiences. Making visible rights to democratic citizenry and representation may include building professional responsibility within schools, rather than applying external accountability structures and testing regimes (Sahlberg, 2007).

Importantly, there are educational issues that need to be addressed related to reading curriculum and pedagogy, access to resources and alignment of educational and occupational aspirations to name a few (Zipin et al., 2013). Disrupting powerful and entrenched barriers to greater educational equality requires systemic changes, wide-ranging redistribution, literacy curriculum innovation and discursive shifts that privilege young people with what they need, rather than what the stratified educational system they become trapped within provides. For students to have a chance of fulfilling and enacting the belief that reading will get them a 'very good job' and facilitate 'a very good future', access to digital texts needs to be addressed as a social

justice issue to ensure students have equity in their opportunities to become readers in the digital age.

Note

1. The ICSEA provides contextual school data related to students' family backgrounds (parents' occupation, their school education and non-school education) and school demographics (geographical location and the proportion of Indigenous students).

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ORCID

Laura Scholes http://orcid.org/0000-0002-8849-2825

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