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WORKING PAPER SERIES

CONNECTION, CONNECTIVITY, AND CHOICE: LEARNING DURING COVID-19 RESTRICTIONS ACROSS MAINSTREAM SCHOOLS AND FLEXIBLE LEARNING PROGRAMS IN AUSTRALIA

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A more recent version of this paper was published as Plage S, Cook S, Povey J, Rudling E, te Riele K, McDaid ,L and Western M. (2023) Connection, connectivity and choice: Learning during COVID-19 restrictions across mainstream schools and Flexible Learning Programmes in Australia. Australian Journal of Social Issues, 58, 212-231. DOI: 10.1002/ajs4.228

No. 2022-10

April 2022

Australian Government Australian Research Council

The University Of Queensland AUSTRALIA

The University of Melbourne

The University of Western Australia

The University of Sydney

NON-TECHNICAL SUMMARY

The COVID-19 pandemic and associated school closures may have constrained educational participation particularly for students in disadvantaged circumstances. During interviews with 30 disadvantaged students in secondary school (14 mainstream/16 Flexible Learning Program) from Queensland, New South Wales, and Tasmania, we explored three interconnected themes impacting home-based learning: connection; connectivity; and choice.

Connection captures the desire for belongingness, and the practices and strategies that facilitated meeting these needs during times of disruption to school routines, and face-to-face learning. It is based in the understanding that schools are more than sites of knowledge transfer, providing opportunities for personal growth in supportive peer and mentoring relations. We found that still feeling part of a school community relied on frequent contact between teachers and students, often leveraging meaningful relations that were built prior to the pandemic.

Connectivity captures the impact of digital, remote, or home-based learning on students' ability to keep up with the curriculum. Factors are the provision of material resources needed to access digital content, digital literacy, and stable internet connection. Even when internet capable devices were provided, living in a remote location with poor connectivity, sharing devices in a household, or difficulties in making use of digital resources all had the potential to interfere with successful home-based learning if appropriate support strategies were not implemented.

Choice captures the flexibility afforded to students and their families to learn in a way that works for them. Here, we often heard that students appreciated being able to 'learn at their own pace,' being provided with hardcopies to learn, if connectivity issues could not be resolved, and the notion of responsibility for their own learning. We found that Flexible Learning Program students were generally better positioned to make choices, possibly because they were socialised to be self-paced learners prior to the pandemic.

Flexible Learning Programs appeared able to draw on an educational infrastructure that was well aligned with responsiveness to individual students' support needs. Findings indicate a need for strengthening student-centred policy and practices aimed at leveraging the affordances of information technology, balancing self-directed and structured learning, and providing holistic support to enable meaningful student choice. We conclude that the lessons learnt during COVID-19 restrictions point to potential strategies that would benefit the educational participation and attainment of secondary school students experiencing complex social disadvantage more broadly.

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Acknowledgements

The research was funded by the Paul Ramsay Foundation (grant number: 0712). Any opinions, findings, or conclusions expressed in this report are those of the authors and do not necessarily reflect the views of the Foundation. This research was also partially supported by the Australian Government through the Australian Research Council's Centre of Excellence for Children and Families over the Life Course (Project ID CE200100025). We acknowledge the support received from Dr Emma Cooke with data collection and Ms Melindy Bellotti with project logistics. We also gratefully acknowledge the support of our partners in the third sector in facilitating this project.

ABSTRACT

The COVID-19 pandemic and associated school closures may have constrained educational participation particularly for students in disadvantaged circumstances. We explore how 30 disadvantaged students in secondary school (14 mainstream/16 Flexible Learning Program) from Queensland, New South Wales, and Tasmania experienced home learning during the first wave of COVID-19. Drawing on semi-structured interviews conducted with these students, our analysis revealed three interconnected themes inflecting their learning: connection; connectivity; and choice. Connection captures the desire for belonging, as well as practices that facilitated meeting this desire during system wide disruptions to school routines and face-to-face learning. Connectivity captures the impact of digitally facilitated learning at home on students' ability to engage with curriculum content and with their learning community. Choice captures the availability of viable options to overcome barriers students encountered in their learning and possibilities to flexibly accommodate student preferences and learning needs. Students from Flexible Learning Programs appeared generally better supported to exercise agency within the scope of their lived experience of home-based learning. Findings indicate a need for strengthening student-centred policy and practices aimed at leveraging the affordances of information technology, balancing self-directed and structured learning, and providing holistic support to enable meaningful student choice.

Keywords: Flexible Learning Programs, Secondary School, Social Disadvantage, Agency, Learning during COVID-19, Australia

Suggested citation: Plage, S., Cook, S., Povey, J., Rudling, E., te Riele, K., McDaid, L., and Western, M. (2022). 'Connection, connectivity, and choice: Learning during COVID-19 restrictions across mainstream schools and Flexible Learning Programs in Australia', Life Course Centre Working Paper Series, 2022-10. Institute for Social Science Research, The University of Queensland.

1. Introduction

The COVID-19 pandemic and associated lockdowns, school closures and learning from home may have placed some school students, already experiencing disadvantage, at greater risk of further educational disadvantage. In response, researchers have begun to examine the impact of COVID-19 on educational outcomes and inequality (see e.g., Champeaux et al., 2020; Clark et al., 2020; Garbe et al., 2020; Gore et al., 2021; Grewenig et al., 2020). We contribute to this growing literature by examining how socially and educationally disadvantaged students experienced the move to home-based learning in response to the first wave of COVID-19 in Australia.

In our study we focus on secondary school students in three Australian states (Queensland, Tasmania, and New South Wales) who were already at risk for poorer educational outcomes. Some were enrolled in mainstream schools and others in Flexible Learning Programs. The latter are accredited programs offering a 'second chance' at education for young people, whose needs were not well-served in mainstream schools (te Riele et al., 2020). We draw on data consisting of 30 qualitative interviews from the Learning through COVID-19 project (McDaid et al., 2020; McDaid, Cleary, et al., 2021; McDaid, Povey, et al., 2021), a large study on the impact of the pandemic on educational inequality in Australia. We identify three interrelated themes—connection, connectivity, and choice—that capture students' experiences of school belongingness and progress in their learning, while usual school routines were disrupted. Finally, we discuss opportunities to transfer learnings across school models and beyond COVID-19 with which we hope to contribute to the emerging empirical scholarship on the impact of the unfolding pandemic on young people's lives.

2. Background

COVID-19 in Australia as elsewhere, resulted in a system wide disruption of school-based education, through school closures, resulting in online supported learning from home for many students. Although system wide, the impacts of this disruption are likely to be unevenly felt, and it is well-documented that disadvantaged students are particularly at risk of ramifications (see Brown et al., 2020; Clinton, 2020; Drane et al., 2020; Joseph & Fahey, 2020; Lamb et al., 2020; Masters et al., 2020; Sonnemann & Goss, 2020; see also McDaid et al., 2020). Schools are an important source of pastoral care and connectedness in students' lives, especially for students experiencing disadvantage (Seymour et al., 2020). In Australia, wrap-around services were vital during this time to support students, especially when they were living in unstable or unsuitable home environments (Brown et al., 2020; Seymour et al., 2020) and increased

demand for support services for students was reported by service providers (Coram et al., 2021; McDaid, Povey, et al., 2021).

Learning through COVID-19

The emerging Australian and international empirical research on the impact of COVID-19 on school students has examined student mental health and wellbeing, learning practices at home, student achievement, and educational inequality. Studies in countries with prolonged lockdowns, such as the UK, found that primary and secondary school students experienced persistent negative mental health effects even after their return to school (e.g., Scottish Government, 2021). A qualitative study of adolescents and young adults conducted in the USA found the pandemic to be a time of "stillness", causing boredom, sadness, and restlessness as well as the loss of important milestones and transition events (Jackson et al., 2021). Hammerstein and colleagues (2021) reviewed 11 studies on the impact of COVID-19 on learning outcomes from China, Germany, the Netherlands, the USA, Australia, and Belgium; all of which had school closures of 7-8 weeks in duration. Most of the reviewed studies reported a negative impact of COVID-19 related school closures on student achievement, comparable to the effect of summer holidays (Hammerstein et al., 2020).

The impact of COVID-19 bears the potential to exacerbate already existing dynamics of social disadvantage. Early evidence from Europe (Champeaux et al., 2020), the UK (Andrew et al., 2020) and Australia (Gore et al., 2021; McDaid et al., 2020) indicates differential experiences of learning loss depending on students' social background. The learning loss for disadvantaged students in Australia resulting from 2020 restrictions to school-based learning is estimated to be between approximately 2-3 weeks (Joseph & Fahey, 2020; Lamb et al., 2020) up to 7 weeks (Sonnemann & Goss, 2020). These estimates need to be considered in conjunction with the well-documented systemic disparities predating the pandemic: PISA 2018 data showed 15-year-old Australian students in the bottom socioeconomic quartile were approximately 37 weeks behind in numeracy and 35 in reading, compared to the median student (Joseph & Fahey, 2020). Estimates of the proportion of Australian students at risk of having learning disruptions due to being physically disconnected from school range from 20% (Drane et al., 2020) up to 46% (Brown et al., 2020). Particularly, students who live in poverty, have a disability, or require adjustments, reside in remote or rural locations and those who are Indigenous are likely to have greater risk of being impacted (Lamb et al., 2020; Clinton, 2020; Sonnemann & Goss, 2020; see also McDaid et al., 2020).

School models within Australian education

The empirical findings reviewed here present important starting points to understand the impact of COVID-19 restrictions on the learning experiences of socially disadvantaged students. This emerging empirical evidence base can be further strengthened by interrogating experiences across different school models. This particularly applies to the role of mainstream school models and Flexible Learning Programs in which students were enrolled at the time when COVID-19 restrictions were introduced in Australia, and how these inflected opportunities to engage in learning, stay connected, and exercise meaningful choices. Flexible Learning Programs are an alternative option to mainstream schooling in Australia for students, often from disadvantaged backgrounds, for whom the mainstream schooling system had not worked well (te Riele et al., 2020). A focus on changing educational provision to better suit students is central to Flexible Learning Programs (McGregor et al., 2015). This strong emphasis on student-centredness (see Bremner, 2020; Starkey, 2017) makes Flexible Learning Programs an interesting point of comparison to mainstream school responses to COVID-19. Flexible Learning Programs come in various forms—some are attached to a mainstream school, while others are separate institutions. They are generally characterised by efforts to address structural disadvantage (such as providing free learning materials and meals, and support for transport and housing); an emphasis on positive relationships (fostering belonging, supporting wellbeing, and adopting more democratic approaches to teacher-student relationships); and tailoring the curriculum (ensuring it is meaningful and authentic for each student) (te Riele et al., 2020). We tease out nuances in student experiences across Flexible Learning Programs and mainstream school models to identify opportunities for improved student-centred practices.

3. The Study

The study draws on data collected for the Learning through COVID-19 project (McDaid et al., 2020; McDaid, Cleary, et al., 2021; McDaid, Povey, et al., 2021). This large project explored the multiple impacts of COVID-19 on student learning utilising (i) rapid reviews of the existing scholarly literature; (ii) empirical work drawing on diverse data sources, e.g., administrative data and qualitative interviews with different stakeholders, and (iii) engagement strategies to feed project findings back to policy makers and practitioners. The project also identified how the pandemic disrupted underlying educational inequality in Australia and identified a portfolio of policy and program solutions to prevent and treat its disruptive effects. Nested in the larger project, we aimed to understand how secondary students at risk for poorer educational outcomes experienced learning during COVID-19 restrictions across mainstream schools and Flexible Learning Programs.

In Australia, State and Territory governments implemented their own restrictions around school attendance. We focus on Queensland, New South Wales, and Tasmania (see Figure 1). Across these three states, restricted access to schools lasted for about 2 months during the first wave of COVID-19 in Australia. No further lockdowns or school restrictions were implemented before we conducted semi-structured interviews with 30 secondary school students between September and November 2020. An interview guide covered topics such as students' living situation, how they felt about school before, during and after the first COVID-19 lockdown, the impact of COVID-19 on everyday life, support with learning between home and school, and students' aspirations and priorities.

Recruitment and sample

After ethics approval participants were recruited through six third sector organisations providing support to families, young people, and children. Where participants were minors, written consent was obtained from their caregiver, and participants assented to the interview. Interviews were conducted by videoconference or telephone. Two interviews were facilitated by an interpreter. Interview transcripts and summaries were de-identified and assigned pseudonyms for analysis. Most participants in the sample were female (n=25) and ranged in age between 13 and 20 years (average 17). Participants attended grades 10–12 (i.e., the final three years of secondary school, except for one younger student). They were currently enrolled in Flexible Learning Programs delivered at three different schools (n=16), or in mainstream schools (n=14). In addition to material support to their families, participants received support from third sector organisations to assist with parenting at least one child (n=6) or to address housing instability (n=6). Some participants reported having a disability or health condition (n=6), and/or involvement with the statutory child protection (n=6) and/or youth justice systems (n=1). One participant identified as Aboriginal or Torres Strait Islander, and 10 belonged to a cultural or linguistic minority (see Table 1).

Data Analysis

We conducted a framework analysis (Ritchie & Spencer, 2003) supported by NVivo 12 software. Framework analysis sits within approaches employing a thematic analytical strategy seeking to reduce complexity through summarisation and synthesis while retaining links and connections within the data. Framework analysis adds to the thematic categorisation of data a case dimension to identify commonalities, differences, and relationships. Our analysis progressed through stages beginning during data collection and data management, moving from familiarisation into initial coding of a small number of transcripts, to development of a coding frame. The coding frame comprised several descriptive and analytical codes which we grouped together into themes. This initial coding frame was discussed and refined among the research team and then applied to the remaining transcripts while continuing annotation and memoing. NVivo 12 facilitates a matrix output displaying cases (i.e., participants) and themes (e.g., connection), which allowed us to chart data for interpretation. We also assigned attributes (e.g., Flexible Learning Program) to cases to tease out nuances across school types. During the interpretative stage of the analysis, we consulted the extant literature to situate our findings.

4. Results

Our analysis revealed three interconnected themes that inflected participants' experiences with learning during COVID-19 restrictions: connection; connectivity; and choice. Below we present illustrative excerpts from interviews using pseudonyms and indicating the school model in which the participant was enrolled at the time of the interview.

Connection–Nurturing support for learning and wellbeing

We asked participants how much they liked school in general, what they liked about it and what school meant to them. The responses to these questions generated rich insights into key areas of importance for these students. For students from both mainstream schools and Flexible Learning Programs, socialising with friends and being part of a community was of great value. Students enrolled in Flexible Learning Programs often further specified a unique sense of connection among their peers:

> We're all kind of like a big, massive family. We all support each other. … Well, the students here, we all have something to connect on. (Eline, flexi)

The participants enrolled in Flexible Learning Programs expressed a sense of belonging to their school community (De Bortoli, 2018; Willms, 2003), while understanding themselves and each other as

individuals with complex educational trajectories and personal challenges. This understanding was frequently articulated as the means for finding common ground to develop empathetic and caring relations with one another. Yet, the onset of COVID-19 restrictions impacted on the capacity to stay connected for both mainstream schools and Flexible Learning Program students. Participants from both school models shared their feelings of missing out on activities that are commonly accessible during secondary school, for example, going to camp together, engaging in hands-on practicals, sports, or excursions (see also Jackson et al., 2021). This was associated with a reduction in pleasure gained from learning and being at school with other young people. A sense of loss emerged from missed opportunities to bond over shared social experiences:

> It took away much of the fun stuff. We could have gone on beach days or some type of stuff like excursions or hanging out with friends in school. It took away that time because we were all at home and we couldn't go anywhere. (Maria, mainstream)

During the interviews, students provided accounts that testified a desire for social connection and belonging. Concurrently, it became evident how social connectedness between students also helped to support their learning and emotional wellbeing:

> We're all students, so we know how to teach each other in a student way, not a teacher way. … we also talk about stuff like, "How was your day?" kind of stuff. "Do you have nothing to do?" And we also talk and complain about things. It's just a way to make me happier. (Jillian, mainstream)

> Me and my friend, yes, we were messaging each other every day, "Hey, do you need help with anything? I just did this piece of work, do you understand it? Do you need me to explain it to you?" So, that was really helpful. Just people in my class, yeah, we were all kind of trying to help each other and explain it to each other in the best ways we could. (Jess, flexi)

Both Flexible Learning Program and mainstream school students reported that they actively sought ways to overcome the disruption to connection with their peers caused by COVID-19 restrictions on school-based learning. This often relied on leveraging the affordances of digital information and communication technologies which we explore in more detail under the theme 'connectivity'. Where connectivity was successfully established between different members of the school community, social connection was also enhanced enabling access to other resources and support. As this Flexible Learning Program student commented:

> I got all the support I possibly could've had. I knew that if I was in the middle of a [zoom] class, that if I was really, really, really anxious that I could just go on my phone and I could just message one of the teachers that's teaching the class and they could just check their phone to the side, and then try and bring up a way around it. (Eline, flexi)

Connection here goes beyond socialising or enjoying one another's company. The above participant reported being prevented by her anxiety from raising questions in an online class but was able to creatively resolve this communication issue with her teacher. This is not an issue that can solely be addressed by providing material resources, such as devices or internet access; or by building digital literacy on how to make best use of these resources. In this situation, and others that participants have shared with us, a relationship of trust between teacher and student predating the move to online learning enabled the student to participate in class in a meaningful way. Without that underlying connection, this student may have simply disengaged from learning. Indeed, we heard accounts from some mainstream school students who withdrew from or only participated minimally in online learning when they felt uncomfortable with aspects of the online modality (e.g., having to show their face, or discuss with others on videoconference). The teacher in the above situation was responsive to the method of communication initiated by the student rather than dismissing it. This points to our third theme—choice—to which we return in the final section of the Results.

Flexible Learning Program students predominantly noted that school staff supported their wellbeing holistically, simultaneously relying on, and working to maintain, connections within the broader school community:

> [Flexible Learning Program staff] checked up on pretty much everyone every couple of weeks, made sure everyone was doing fine, made sure everyone wasn't struggling financially, and they pretty much just stayed there as the support network that people knew they had. (Jenna, flexi)

While most students expressed appreciation for the check ins, availability, and school staffs' willingness to connect with students in the ways that worked for them, not all felt that this level of care was constantly needed. Nonetheless, these Flexible Learning Program students appreciated the sense of being cared for and about. This sits in contrast with the experiences of some mainstream school students:

> [Teachers] would be like, "Oh, I hope you guys are well and you're doing your work," and stuff like that, but they wouldn't check on you personally. They would just do it on the whole class. … an email

> would have been fine, but a phone call would have encouraged me more because I'd be like, "Oh, the teacher took the time to call me to say if I'm doing my work and stuff." (Maria, mainstream)

Most mainstream school students experienced the support on offer from their school as general (i.e., addressing all students communally) or as patchy (i.e., one teacher as standing out among others). Sana, for instance, received check ins and reminders only from her English as a Second Language teacher who went out of their way to make themselves available. Both Flexible Learning Program and mainstream school students proactively engaged in practices to meet their needs for peer support during times of disruption to school routines, and face-to-face learning. However, Flexible Learning Program students additionally expressed appreciation for staying connected with school staff, teachers, and support workers. We found that still feeling part of a school community relied on frequent contact between teachers and students, often predicated on trusting relations that were nurtured prior to the pandemic.

Connectivity – Material resources, digital literacy, and learning together apart

Connectivity captures the impact of digital, remote, or home-based learning on students' ability to engage with curriculum content and resolve issues in understanding learning materials that would allow them to progress in a timely manner. During COVID-19 restrictions, school staff and students relied to a large extent on online modalities to stay connected and continue teaching and learning. Most participants reported having access to a device and internet (see Table 1), often after having been (temporarily) supplied with digital resources (e.g., laptops) by their school or service provider. Nonetheless, material barriers remained a worry for participants from either school model. Many expressed a sense of 'falling behind' due to connectivity issues:

> Can't get online with [class] because it was just in here where my mum lived was real bad. … I had good reception for the phone, but when I got on the computer, it wasn't really good. (Scott, flexi)

> I was way behind. I did not concentrate at all. I did not do any work…. It was online, so every day we had Zoom … we don't have internet at home. My mum has shared data, so we hotspot to her phone. So when she leaves, it's just me and there's not internet. (Sana, mainstream)

Both Flexible Learning Program and mainstream school students experienced forms of material deprivation. Even after being given access to devices and online learning platforms, students still had to negotiate patchy internet connections and resource sharing across multiple other family and household members. Some reported not staying up to date with the expectations on their learning, feeling that they

would not be able to do any of the assigned work online anyway. Sana contrasted her struggles with online learning to the possibilities to keep up when offered an offline learning modality:

> [English] wasn't that hard … because I can do it offline. They actually post the book to us. We've got the book and they told us what to do. (Sana, mainstream)

Another mainstream school student commented:

> I didn't really get offered much. … they only gave [Dad] like a booklet for English and a booklet for Maths. I didn't understand any of that … all the teachers were still setting up everything on eLearn, even though Dad went to speak to the school about the wi-fi problems (Courtney, mainstream)

Examples like the ones above show that disadvantaged students benefit from solutions that are tailored to their individual circumstances, and that they might be further disadvantaged if requests for alternative provisions are not suitably met. Most Flexible Learning Program students reported being provided access to material resources, multiple pathways to submit their schoolwork for feedback and opportunities to flexibly combine online and offline learning. Flexible Learning Programs with smaller class sizes and support infrastructure (te Riele et al., 2020) were well positioned to implement varied responses to students' needs. This demonstrates how strategies focussed on connectivity to participate in online learning need to be complemented by alternative provisions that permit students to learn using the modalities that work best for them.

The importance of personalised responses is further supported when considering varying levels of digital literacy among students. Some participants struggled to set up accounts for and navigate online platforms. Students experienced a learning curve, and initial issues were resolved over time when guidance from teachers was forthcoming. However, often access to and use of online modalities remained limited to basic functionalities. Moreover, limited connectivity and the nature of online modalities changed the quality of interactions between students and teachers. Specifically, the spatio-temporal distance imposed by remote learning exacerbated for some the struggle to keep up with their schoolwork:

> About the online school, I feel lost, like I can't catch up with my work during school … If I have a question, … in school, I still can meet teacher face-to-face and ask some questions. During online school, I have to ask them to email, then has to wait for a long time to get an answer. (Jillian, mainstream)

> I hated it. … just sit there and be clueless while trying to wait for teachers to respond…. So it was pretty bad, like I missed having them like there, just like calling out, like putting my hand up and then she'd come over and help me. (Max, flexi)

Learning from home was experienced as being out of sync with teachers and peers compared to the immediacy of classroom interactions when present in a shared physical space. A lag between a question or issue in learning emerging and its resolution caused frustration to students from both Flexible Learning Programs and mainstream schools. Participants narrated that where tailored approaches were on offer, this lag was reduced:

> We just transferred over to Zoom program. …if I have any questions about the class I can text them. I can email my teacher. It's like Messenger on the website that we use. So, it's super convenient. We can also book in Zoom sessions with our teacher, like one-on-one sessions. (Jenna, flexi)

> We could send them a message if we needed to or call them and send them work for feedback…. I talked to one of them, just my maths teacher because I was a bit stuck on a couple of the questions… [teachers] replied the same day, usually. When they weren't in their class. … I kept up with my work (Bethany, mainstream)

The majority of participants who reported tailored approaches (e.g., teachers offering a variety of communication channels from which students could choose) were enrolled in Flexible Learning Programs. With this in mind, we turn below to the conditions in which students could exercise agency to make choices about their learning.

Choice – Recognizing students' circumstances to support autonomous learning

Interwoven with the themes of connection and connectivity presented above, is the theme of choice. Choice is meaningful only when interrogated within the parameters of social relations (within which social agents define the issues they are faced with) and material conditions (the resources at their disposal to address issues). Specifically, choice in the context of home-based learning captures the availability of viable options to overcome the barriers students encountered in their learning and in nurturing their connection with the broader community. We often heard that students appreciated being able to communicate with school staff on their terms, or being provided with hardcopies, if connectivity issues could not be resolved. Further, choice was relevant to how students from both mainstream schools and

Flexible Learning Programs confronted the challenge of having to set aside time and space for their schoolwork. As these students shared:

> I can do my work anytime I want. But I'll be just wait. I want to be procrastinated, procrastinating it forever, "Oh, I still have time. I can do it later, later, later. Later, later I can do it." I will never finish it … I feel so bad… I kind of disappointed about myself. (Jillian, mainstream)

> It was just really difficult because typically when you're at school they give you one piece of paper, so to say, finish it, you get it next. But with the online work, it's just all these things at the same time and it just stresses you out because you feel like you have to do it all at once … I just gave up on it because it was just so stressful and I was just getting so worked up over it and overwhelmed. (Summer, flexi)

As Summer and Jillian's accounts show, leaving students to "choose" when to study without preparation or support was double-edged, generating a sense of personal responsibility, but also inviting feelings of disappointment and failure. Some students needed support to structure their day or to breakdown their work into smaller amounts to prevent them from being overwhelmed. It is important here to acknowledge that autonomy is more than being left to decide if, when and to what extent to engage in schoolwork. School practices informed by understanding students as agentic could create enabling conditions in which students' motivation to engage with learning would be reinforced and feelings of stress and pressure alleviated. For example, Flexible Learning Program students explained what differentiates their schools from mainstream schools predating the pandemic:

> They let you do things at your own pace or help you with it if you need help. You don't have a certain set time to do things. You just do whatever benefits you. (Sandy, flexi)

> We all work at our own pace… You finish [your work] when you can finish it … You can never plan things around the kids … I just learned that you just go with the flow. Don't plan ahead with, you know, "At this time I'm going to be doing math. At this time I'm going to be doing English." (Kaya, flexi)

Students from Flexible Learning Programs clearly benefitted from having been socialised into self-paced and self-directed learning prior to the onset of COVID-19 restrictions. That is not to say, that they did not face the same struggles as mainstream school students, but they were better equipped to reflect on their behaviours and its implications against the background of the broader socio-historical context of an ongoing pandemic:

> I go to myself, "Oh yeah, but this is future [Jess]'s problem. [Jess] right now is just going to enjoy this. …" Is that beneficial, even in the slightest? No, but I think it was important to still just kind of give us all ourselves a break, because it was a very hard time. (Jess, flexi)

Jess went on to explain how her Flexible Learning Program supported learning choices by expanding the time allocated to complete tasks and showing leniency when due dates were not met. Flexible Learning Program students did not have to negotiate extensions individually but were granted flexibility to progress their learning in ways that suited them during this time. Where mainstream school students were granted extensions, they likewise expressed their relief:

> I had two assignments overdue. But then my teachers, they're so understanding. They can give an extension to finish it. They gave me more time to do it, so it was okay…. I felt like the weight went off my shoulders. (Sana, mainstream)

At the same time, students from both school models were aware of the possibility to procrastinate. Many of them consciously deliberated the potential negative consequences of not getting any work done, which often resulted in a shift to do the expected work. Others did not uphold pre-pandemic school routines (e.g., attendance or completing tasks in one sitting), but nonetheless delivered the outcomes they were expected:

> We were doing online school with Google Classrooms, but I'll admit, I didn't really like attend much on that term. I did my work and that, but I didn't just like show up to classes that term. (Scott, flexi)

> If I wanted to play games, I'd have games…. So long as I have my work done on time…. It's your fault if you didn't do it…. You didn't have any excuses … I did do the work, but I would–I always wait because I had so much time to do it. I'd just do a little bit, a little bit and by the time I got close to [the due date], I'd already finished it. (Mike, flexi)

The above are just two examples of how participants reconfigured the way they learned to accommodate the constraints in which they found themselves. Considering that these students were at risk of disengaging from learning even before COVID-19 restrictions, these are remarkable and encouraging findings. Having the scope to decide how they utilised their time allowed them to stay connected with schoolwork. We found that students enrolled in Flexible Learning Programs were generally better positioned to exercise agency, presumably as they were socialised into the school model prior to the

pandemic. These programs were generally able to draw on an educational infrastructure (see te Riele et al., 2020) that was well aligned with responsiveness to individual students' support needs.

5. Discussion and conclusion

We identified three overlapping themes in our participants' experiences of learning during COVID-19: connection, connectivity, and choice. Connection captures the desire for social belongingness, and the practices to fulfil this desire during times of disruption to school routines. Elsewhere, connection was found to be important in predicting positive emotional state, which impacted active learning behaviour during COVID-19 restrictions (Holzer et al., 2021). In our study, connection is based in the understanding that schools are more than sites of knowledge transfer, providing opportunities for personal growth in supportive peer and mentoring relations (Brint, 2017). We found that meaningful and reliable social relations predating the pandemic facilitated the access to learning, wellbeing, and material support during home-based learning.

Connectivity captures the impact of digital, remote, or home-based learning on students' ability to keep up with the curriculum. This includes the provision of material resources to access digital content and stable internet, but also digital literacy. These conditions are difficult to meet for all students (e.g., Lamb et al., 2020). Even when internet capable devices were provided, living in a remote location with poor reception, sharing devices in a household, or difficulties in making use of digital resources could interfere with successful home-based learning in the absence of appropriate support strategies (see Seymour et al., 2020). Further, we found that the immediacy of classroom interactions did not transfer well to remote learning, requiring a combination of real-time as well as asynchronous communication strategies. Being afforded flexibility to participate in learning and stay connected with the school community in ways that worked for them (i.e., offline and online), was experienced as enabling by participants.

Choice captures how such flexibility was afforded to students and their families. Learning during COVID-19 restrictions placed increased demands on students to organise their study activities. Here, Flexible Learning Program students appeared to benefit from having been socialised into a school model that promotes self-directed learning. This resonates with previous findings utilising a Self-Determination Theory lens, where competence predicted positive emotions and intrinsic motivation to learn, which in turn predicted active learning behaviour (Holzer et al., 2021). Concurrently, our findings highlight that choice is a problematic, or even naïve notion, if detached from students' lived experience. Possibilities to exercise authentic choices required recognition of the ways in which students' made sense of their

circumstances, what they identified as issues salient to their learning and their understandings of workable solutions. Teaching and support should be responsive to students' experiences, accommodate their strengths and needs, as well as the resource constraints they and their families face. Our analysis suggests that Flexible Learning Program students experienced greater scope for agency than mainstream school students, both prior to and during home-based learning.

We acknowledge the strengths and limitations of the present study. As for all qualitative research, we do not produce generalisable insights but encourage engagement with the findings in their specific context. The sample on which we draw is balanced to capture multiple and at times confluent forms of social disadvantage among adolescent secondary school students. We also capture insights from marginalised student populations whose perspectives may often be overlooked, including students who parent at least one child, live with a disability or chronic medical condition, belong to a cultural or linguistic minority, or identify as Aboriginal or Torres Strait Islander. We recognize that female participants are overrepresented in our sample and encourage future studies to include greater gender diversity. The balanced split along students enrolled in Flexible Learning Programs and mainstream schools provided some analytical leverage to tease out nuances across these groups. Yet, we recognize that in the general population Flexible Learning Program students are a much smaller group. Hence, our sample is not representative of mainstream school or Flexible Learning Program students. Where we report differences between groups these are based in the perspectives of the students we interviewed, and our finding that Flexible Learning Programs students (albeit from 3 different institutions), experienced a greater sense of agency merits follow-up for verification. This article is also limited to analysing the experiences of secondary school students. We acknowledge that younger children's and other social actors' perspectives would greatly enhance the insights on learning during COVID-19 restrictions and strengthen key learnings for student-centred practice and policy. Some of these insights are presented in our reports based on the Learning through COVID-19 project, analysing data from primary school students and mapping the experiences of third sector service providers (McDaid, Cleary, et al., 2021; McDaid, Povey, et al., 2021). Finally, consideration of the role of parents in students' learning during the pandemic was beyond the scope of this article. We explore the role of parent engagement during adolescence in the socio-historical context of COVID-19 elsewhere (Povey, et al., in press).

Despite some limitations, we believe our findings have important implications for education policy and practice. Almost all participants had access to internet capable devices and often data to go online. The school system and service sector responses are laudable, often having facilitated the timely provision of

basic resources to participate in online learning through either donations or lending schemes (McDaid, Povey, et al., 2021). Yet, our findings demonstrate that access to information and communication technologies (ICTs) in and of itself was insufficient to promote the connectivity and digital literacy that students needed in order to learn. The provision of technology needs to be embedded in broader practices to maximise its utility (see Seymour et al., 2020). For instance, digital technology is most effective when used by students to apply known concepts, rather than learning new ones (Joseph & Fahey, 2020). We also found that making online modalities the default potentially further disadvantaged students who had no prior access to such devices or little experience using them in their learning; in particular, when offline learning preferences were poorly accommodated. This highlights the need to strengthen the incorporation of technology-mediated learning into the curriculum for both Flexible Learning Program and mainstream school students, while continuing to provide offline learning modalities of equal quality.

Additionally, policies guided by the principles of student-centred education (Bremner, 2021; Starkey, 2017) can produce the conditions for greater student autonomy and flexibility. Mainstream schools would do well to integrate greater scope for their students to exercise agency in their learning. Educators need to be supported in how they provide tailored support to students with learning needs in remote learning contexts to ensure these students do not disengage or fall further behind. Educators also need to be supported in creating learning conditions which acknowledge each learner's strengths and unique circumstances, for example by scaffolding schoolwork where necessary, while granting flexibility when opportune. Finally, we clarify that our call for better educational conditions to empower students to make authentic choices in their learning is not to be interpreted as an argument in favour of cutting them off from much needed support systems. On the contrary, autonomy can only thrive in conditions in which basic material needs are met, and reliable ongoing support is available to address mental and physical health concerns. During the first wave of COVID-19 in Australia, demand for support from service providers has increased and they have provided a vital service to students struggling (Coram et al., 2021; McDaid, Povey, et al., 2021; Seymour et al., 2020). That includes the provision and integration of adjacent support services into schools. Examples are school-embedded counselling services with low-threshold access for students. Such services are advantageous in the opportunities to develop supportive relationships over time. Other examples include child minding services attached to a school allowing parenting students to complete their secondary education. Other services might be emergency relief, career development or legal services. One key learning from our research is that it does not only matter how many services are made available and what need they target, but that relational investment from

educators and service providers contributes to a welcoming and trusting atmosphere in which vulnerabilities can be shared and addressed.

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