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Pre-Enchanting Young People in Learning and Employment: Building Safe Relations for Diverse Students

Bec Neill

Introduction

This chapter describes research exploring the capacity of integrated arts and digital-technologies curriculum designs to strengthen Year 6/7 students' (aged 11 to 12 years) sense of belonging and identity within a diverse Australian primary school.[1] This school is in an inner capital city suburb characterised by high levels of unemployment, poverty, and linguistic, cultural and religious diversity. Such diversity has been increasing in Australia since the 1970s, when the colonial 'White Australia' policy was dismantled and subsequently replaced with policies promoting

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[1] The research formed part of a broader research project, conducted across a variety of public and parish schools. It focused on developing cultural and schooling connections, and enhancing educational achievement for refugee and migrant students, through site-specific initiatives, co-designed with school leaders and teachers (Soong & Comber, 2017; Wrench et al., 2017).

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multiculturalism, while noting that—prior to English colonisation—equivalent diversity also existed, with First Nations peoples speaking a minimum of 250 languages between them (Heugh, 2014). Ten students completed a term-long (ten-week) extension unit, scaffolded on a prior whole-of-class curriculum unit, in which students produced bilingual digital stories designed to instruct or inform (Robin, 2006) younger peers about school routines. Students in the extension group produced print media books in eight languages (beyond English). They crafted accompanying play resources and activities to be used in junior primary classrooms (students aged 5–7 years). Whilst the planned curriculum focus was on written instructional literacy, the pedagogical design of the book and activity-making focused on digital and cultural literacies. Understandings of the challenges such students face include disrupted schooling, varying levels of English competency and experiences of trauma and cultural displacement (Hattam & Every, 2010). The design established a 'makerspace' (Sheridan et al., 2014) in which students' funds of knowledge (Moll & González, 1997) were privileged and agency welcomed.

Using creative and critical systems approaches, the analysis re-imagines or thinks-in-images about the participating prospective secondary students' technical, practical and emancipatory knowledge interests (Habermas, 2005), which they shared as they developed and made digital and physical designs of books and play-based activities. The analysis explores the schooling interfaces that multilingual students experience by examining the relation-making and identity work they undertook in the making space, and the 'informational support' (Checkland, 1999a, p. 54) they sought in pursuit of their knowledge interests. This attunement to students' knowledge interests complicates dominant cultural views of their schooling experience within education debates and generates possible pathways for pre-engaging young people in learning and future employment during their transition from primary to secondary schooling.

The chapter proceeds by outlining the importance of pre-enchanting diverse students in learning and work opportunities and the arts-based, relational and Indigenist approaches which informed the research. It details the specific methods used to hear, synthesise, map and narrate their stories and the knowledge interests they enacted within the making space. It concludes by discussing the pre-enchanting possibilities for

sustaining diverse students' engagement with secondary learning and work opportunities that are offered by creative and arts-based approaches that integrate cultural/social/family relations within learning.

The Linguistic Paradox of Australian Schooling

In 2016, a little over one-fifth of Australian residents under 24 years of age spoke one or more home languages other than the language of schooling (English) (ABS, 2016). Assuming the 2011–2016 trend is sustained, that figure will rise to one-third by 2021 (French, 2016). Yet Australian education systems continue to be shaped by the 'monolithic weight' of monolingual policy settings (French & Armitage, 2020) which in turn drive quantitative and 'big data' educational research focused on refugee and migrant students' acquisition of English language literacy and proficiency (Ferfolja & Vickers, 2010; Wrench et al., 2017). Such research masks the experiences, knowledges and skills of multilingual refugee and migrant students, teachers and communities (Matthews, 2021, p. 727), as do national datasets used to shape broader public policy.

For example, in the 2016 Australian census respondents were asked 'Does the person speak a language other than English at home?', yet despite the more multiplicitous responses they might have supplied, only their (sequentially) first response was recorded (ABS, 2017). Nor is this linguistic data integrated into the scaling model used by the national curriculum authority to ensure purportedly 'fair' comparison of individual school performance for the purposes of school 'improvement' (ACARA, 2019, 2020). Australian multilingual students are more likely to attend government schools in which most students are multilingual (D'warte, 2015; Matthews, 2008), with their multilingualism likely to occur alongside social and economic disadvantages (French & Armitage, 2020, p. 93). Students living in relatively poorer and more disadvantaged communities are more likely to experience social, emotional, learning and physical difficulties than those in more advantageous (or advantaged, or privileged) communities (Edwards & Bromfield, 2010).[2]

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[2] After controlling for other protective or advantageous variables such as parental engagement in the workforce and mothers' levels of education.

For multilingual refugee and migrant students, monolingual educational structures pose additional challenges. These structures preclude systemic adoption of authentic (Freire, 1983), culturally and epistemologically diverse (Nakata, 2007; Rigney, 2021) and multilingual (Canagarajah, 2012; Heugh & Stroud, 2018) approaches that are fundamental to socially just education for all students. Such structures create schooling spaces in which students' identity work, their complex and inclusive narrations of the political, historical and cultural contexts of their experiences, and hence critical reflection on them, are oppressed and absented (Matthews, 2021).

The Importance of Pre-Enchanting Diverse Students

This research attends to how refugee and migrant students might be pre-enchanted, or relationally supported in making safe and sustained connections and transitions to secondary schooling and, ultimately, future work learning opportunities. Australian students' transition to secondary schooling coincides with their emerging adult engagement with 'the world'. During this transition they experience profound physiological and psycho-social development, which many find challenging and, for some, is a catalyst for early disconnection from formal education (Pendergast et al., 2017). Where a priori experiences of trauma may neurologically shape adolescents' cognitive and psycho-social development (McLean, 2016), and hence capacity to connect with secondary schooling, students experiencing trans-cultural migrations, ongoing colonisations and poverty (Atkinson, 2002; Wrench et al., 2017) face further challenges to sustained secondary schooling success.

Approximately a quarter of Australia's humanitarian migrant intake is of young people aged between 10 and 19 years, with these and even younger refugee and migrant students facing significant barriers to educational success in Australia (Correa-Velez et al., 2017). Because schooling is 'profoundly relational' (Skattebol & Hayes, 2016), students from refugee, migrant and colonised families face more complex transitions to,

and interfaces within, secondary schooling. Many primary school educators express concern for their transitions to secondary schooling, noting they are likely to include further traumatic experiences (Wrench et al., 2017). For example, experiences of family poverty are amplified by higher rates of unemployment that often instigate disconnection to secondary schooling for the most disadvantaged students, making their future labour market engagement precarious (Nunn et al., 2014). Finding ways to pre-enchant and pre-engage prospective secondary students in secondary and employment learning opportunities is core to socially just education and crucial to their cultural and socio-economic futures.

Critical, Creative and Cultural Framings of the Inquiry

This inquiry adopted critical systems, creative, and Indigenist understanding of ways of being and knowing. Underpinned by interconnected ways of knowing, embodied ways of being, ethics of care, creativity and plurality, these understandings presume the 'fundamental interconnectedness' of 'everything' with 'everything else' (Rappoport, 1966, as cited in Hammond, 2003, p. 157), and ongoing, reciprocal and dynamic engagement with Country, culture/language, community, family and spirit (Nabobo-Baba, 2012; Rigney, 2021; Yunkaporta, 2009).

Critical systems approaches seek more holistic and irreducible understandings of human-activity systems and the informational support people require to make meaning within them (Checkland, 1999b; Georgiou, 2007; Hammond, 2003) through ongoing situated conversation, communication and creative social inquiry (Hirschheim et al., 1991; Lanzara, 1983). Equivalent relational approaches are necessary for culturally safe and decolonising ways of being, knowing and learning, and socially just education for all students (Rigney, 2018). These multimodal ways are centred by an ethics of care, love and relationality, and proceed through protocolled processes of listening, hearing, talking, picturing, singing, dancing, doing and making (Farrelly & Nabobo-Baba, 2014; Martin, 2008a; Nabobo-Baba, 2012; Yunkaporta, 2009).

Similarly, arts-based and creative pedagogies and practices argue for multimodal affordances that generate reasons to engage in more

purposeful learning experiences (Rankin et al., 2021, p. 285). Integrated within these learning experiences are embodied processes of looking, listening and perceiving, and a relational ethics of care (MacGill, 2019). These processes of dialogic meaning-making (MacGill, 2019; Rankin et al., 2021) offer ways of engaging in culturally respectful and safe dialogue. They privilege embodied experiences of emotion and feelings, encompass non-verbal and verbal communication and require 'ongoing affective attunement' or perceptual ability within reciprocal relations (Farrelly & Nabobo-Baba, 2014, pp. 323–327).

In school settings, learning within making spaces is supported through blurring disciplinary boundaries and incorporating multiple 'ways of seeing, valuing, thinking, and doing' (Sheridan et al., 2014, p. 527). Students engage in multimodal knowledge practices through talk, digital and physical materials, embodied actions, non-verbal communication and positioning themselves within physical spaces (Kajamaa & Kumpulainen, 2020). Such integrated pedagogical practices are unprioritised in Australian education systems (Pendergast, 2009) and present a key challenge with regard to teacher uptake (Paige et al., 2019). To date, makerspace/making research largely focuses on the use of digital technologies and STEM curriculum outcomes (Godhe et al., 2019; Kajamaa & Kumpulainen, 2020; Sheridan et al., 2014), drawing attention to ways in which some types of making are legitimised, and others marginalised within education policy (Godhe et al., 2019).

This research frames digital and material making as integrated learning processes that can facilitate culturally safe ways of knowing and being, and afford students opportunities to explore multi-disciplinary technical, practical and emancipatory knowledge interests (Habermas, 2005, pp. 315–316; Wallace et al., 2005, p. 156). Making processes are relational and reflective, embodied, and inclusive of human and non-human actors, affording students space to acknowledge and narrate diverse cultural lifeworlds and schooling experiences. They offer 'outsider' researchers (Martin, 2008b) opportunities to reflexively learn about cultural ontologies and epistemologies beyond their own.

To do so safely and respectfully, 'outsider' researchers must be transparent about their positions within research relations (Martin & Mirraboopa, 2003; Nabobo-Baba, 2008). Such transparency ensures critical and

creative systems research proceeds with 'validity' (McGrath, 2005). In this research, I am an 'outsider' in Asia Pacific geographies, my family having arrived in 'Australia' via 'settler' histories encompassing naval, public administration and agricultural colonisations of Asia Pacific cultures.[3] So too I am an 'outsider' in the students' learning spaces, a visiting 'university researcher'. My outsider position in the research shapes what can be understood about diverse schooling and participating students' social and schooling lives. It is one of many inherently incomplete and partially possible views of more socially just education that creative, embodied and relational methodologies and pedagogies might provide.

Relating and Making with Pre-Enchanted Young People

This section describes how the research proceeded through a whole-of-class curriculum unit and an extension unit with teachers at a small parish school[4] located in an inner-suburban community of an Australian capital city. In total, families attending the school identified with 22 cultures, various faiths, and spoke 40 different home languages. Post-World War II, the school's surrounding geographic community experienced multiple waves of refugee and immigrant families moving into the area (ABS, 2016). Residents experience some of the most extreme relative socio-economic disadvantages within Australia (ABS, 2018).

Cognisant of this context, school leadership committed to a programme of action research projects which sought to support students' being, belonging and becoming. In this specific project, iteratively co-designed curriculum units considered the significance of family engagement in and shaping of young people's cultural, linguistic and literate identities (Luchs & Miller, 2016; Phinney et al., 2001). Co-designs were also informed by digital storytelling research (Darvin & Norton, 2014; Lenette, 2019). Teachers and researchers decided on curriculum designs in which students produced bilingual digital stories designed to instruct

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[3] For example, India, Ceylon (Sri Lanka) and Australia.
[4] Part of the Catholic Education system in that state.

or inform (Robin, 2006) younger peers about school routines they needed to follow, as identified by the students and workshopped with teachers. Students chose a school routine and developed a digital procedural text, accompanied by photographs they had taken.

The extension unit design invited ten students to refine previously produced digital stories, produce print versions of them, and craft accompanying play resources and activities to be used in junior primary classrooms. It sought to create further authentic literacy learning experiences, and integrated opportunities for students to explore technical (design and digital), practical (schooling) and critical (cultural and multilingual) cognitive interests.

Making, Talking and Listening

Students were invited to explore available crafting materials and tools to create play-based activities to support younger peers' emergent reading skills. In this way, students engaged in crafting with caritas (MacGill, 2019) and empathetic relational practice that included human and non-human relations equally (Farrelly & Nabobo-Baba, 2014). Book and activity-making occurred in a communal space located centrally between several classrooms, with some desks and chairs in the middle and a 'wet area' at one end. Book making occurred in the middle space, to which researchers added a laminating machine and laminating pouches and a spiral binding machine. Most crafting activities occurred in the wet area, which contained an L-shaped bench underneath windows, with sinks and power points, and high tables and stools arranged centrally in a rectangle. Crafting materials and tools available in the space included coloured felts and leather, heavy cardboard, corrugated board and balsa wood, wools, thread and needles, coloured beads and baubles, hot glue guns, cutting knives, scissors, and needles, paints, papers and brushes.

The researchers workshopped students' activity design ideas and I demonstrated the use of crafting tools and book-making machinery. Whilst school, teacher-family research consent authorised me to be with students in the making space, they assented to me observing and recording, and making research representations, or not, of the identity work,

knowledge interests and information needs they shared whilst making. This trust was built over time and through listening to talk, silence and emotion (Farrelly & Nabobo-Baba, 2014), making with care (MacGill, 2019), and curriculum designs connected to students' authentic life-worlds (Wallace et al., 2005). Semi-structured conversations and informal chats with students were audio-recorded with students actively exercising their right to remove sections of recordings they did not want to be included in the research data.

Listening, Picturing and Narrating

Audio recordings and researcher notes of the making sessions were subsequently transcribed by the researcher, and then visually mapped using critical systems methods. Transcribing and image-ing was a process of re-listening and wondering more, or as Arthur Frank explicated in a seminar with International Institute for Qualitative Methodology postgraduate students, 'hanging out' or continuing 'to live with' conversations that occurred in the research space (Eldershaw et al., 2007, p. 135).

Transcribing was a non-linear and iterative process, moving between recordings and transcribed sections as I reflected on and recalled interactions between storytellers and story listeners (Boje, 2006). It afforded further affective attunement to students' specific cultural understandings of personhood and identity (Farrelly & Nabobo-Baba, 2014), enhancing the analysis' capacity to sweep in and represent their perspectives. Final iterations of transcribing involved chronologically re-listening to each recording, and checking for further co-created story events (Boje, 2006).

Students' stories of their multilingual lifeworlds and knowledge interests were then synthesised using systems picturing techniques (Checkland, 1999b). Rich picturing can convey complex and interwoven problem situations, examine structures and processes within them and more holistically think through subsequent strategies to transform them (Checkland, 1999b). It allows for mapping difference and commonality within empathetic relations (Farrelly & Nabobo-Baba, 2014). Where rich picturing is 'thinking-in-images', it enables moving 'beyond the categorised and

known ('knowledge') into new experiences and new capabilities' (Cranny-Francis, 2008, p. 364).

Hence, I created two rich pictures, each critically and visually structured by the theoretical framings of the research. Students' cultural and linguistic identities, knowledges and family contexts and relations structured the first rich picture. Structuring the second was students' engagement with planned and enacted technical, practical and emancipatory knowledge interests (Habermas, 2005); that is, their 'learning about the way the world works'; relating and communicating to 'make personal sense and solve practical problems'; and acting with self-reflection 'to find harmony between personal, community and future generational needs' (Wallace et al., 2005, p. 160).

For each rich picture, I have woven students' original oral/embodied performances into accompanying situation narratives. These narratives are more textual re-tellings of students' stories, now shaped by layers of representation (Riessman, 1993, pp. 13–15). In the following two sections, the rich pictures and situation narratives provide a more holistic view of participating students' relation-making, identity work, knowledge interests and information needs. Pseudonyms, chosen from students' cultures and consistent with the original naming/cultural meaning, are used to identify participating students and their views. Such views are necessary precursors to considering how students in diverse schools might be pre-enchanted with secondary schooling and work learning opportunities.

Students in the Making Space

Figure 10.1 maps students' language literacies, identifying home and subsequent languages students could understand, speak and/or read/write, providing insights into family and cultural contexts. Between them, students could understand, but not necessarily speak, 14 distinct languages, in addition to their schooling language of English.[5]

Seven students each spoke ten different languages, with five of these students able to independently read/write first language texts in the

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[5] This count does not include Japanese and Italian taught at the school as additional languages.
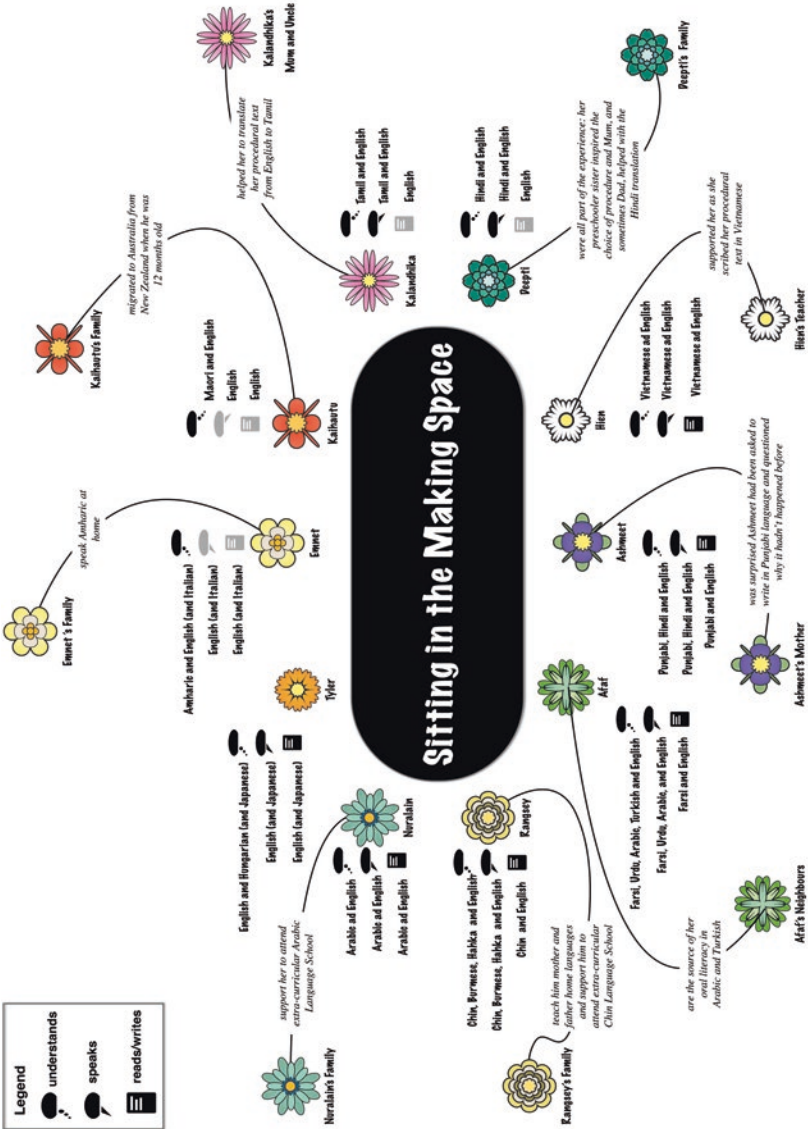
Fig. 10.1   Students' language knowledge and literacy supporters visible in the making space

relevant script or in transliterated Latin alphabet. Students used six home languages, together with Japanese and Italian, to produce their procedural texts.

Cultural Histories and Geographies

In the making space, students' conversations provided nuanced views of their cultural lifeworlds and Asia Pacific histories. Three students were born in India and one in Pakistan, countries in which multilingualism is the norm. Ashmeet wondered whether any of her classmates could '*hear me speak*' in Punjabi. Deepti, a Hindi speaker, responded, 'Afaf would' referring to an Urdu speaker. Ashmeet replied '*Oh yeah Afaf would and maybe you would but no one else*'. Ashmeet asked, '*Afaf, how much languages do you speak?*'. As Afaf began listing them, Kalandhika interrupted asking hopefully about her mother tongue, '*Do you speak Tamil?*'. Afaf's negative response emphasises how geographical and linguistic distances between languages shape students' relation-making. Ashmeet's naming of Afaf and Deepti as capable of 'hearing her' in Punjabi reflects the mutual intelligibility of Punjabi, Urdu and Hindi, all Indo-Aryan languages, in contrast to Tamil, a Dravidian language.

Returning to making, Ashmeet and Afaf tested out the mutual intelligibility of Urdu and Hindi, asking each other for materials and tools across the table. I asked if they were speaking Urdu, with Afaf saying '*Yes*' and Ashmeet '*Hindi*'. Afaf explained to me '*Yes, it's just the same*'. When Deepti asked, '*Isn't it [Hindi] the most common one?*', Afaf replied '*In India*' adding as an aside '*I'm so proud of myself that I speak Hindi—ha ha*'. Ashmeet contributed '*It's compulsory to know Punjabi and Hindi in India, they're the two main languages, English is […] an option*'. Deepti added a policy update, '*But from now on English too*'.

I wondered aloud, '*How many people speak Hindi in the world?*'. Afaf responded '*Our schools are in Hindi[6] not Farsi, so there's one*'. I replied, '*Once upon a time Pakistan and India …*' with Afaf completing my sentence '*Yes was same and then they had a fight*'. I introduced the role of the British empire's arrival and departure in this separation, after which we

[6] Possibly referring to Sindhi (or Urdu) rather than Hindi.

sat in silence together for a few moments. Afaf's linguistic repertoire included, '*Irani, Urdu, Farsi, kinda Turkish and kinda Arabic*' and perhaps now Hindi. Commenting *'They are all easy for me, I would be happy with [all] those languages'*, her confident multilingualism sheds light on the complex histories of Pakistan.

It also provides insight into her family's migration history, given Afaf distinguishes between her home language Farsi, which she also reads and writes, and the Farsi spoken in Iran.[7] Nuralain, whose family migrated from Iraq, noted the difference between Afaf's '*kinda Arabic*' learnt from neighbours, and her home language, explaining '*The Arabic we speak is different from other parts*'. She is read/write literate in Modern Standard Arabic, attending extra-curricular language school[8] throughout primary school. Rangsey, like Nuralain, also attended language school, learning to read and write Chin. When naming the languages he speaks, he told me, '*One is Burmese, one is Chin and the other one is Hakha*', differentiating between his mother's Falam-Chin and his father's Hakha-Chin, both spoken widely across the Western Burmese state of Chin.[9]

Afaf, Nuralain and Rangsey's linguistic lives draw attention to Asia Pacific geographies characterised by high levels of cultural, linguistic and religious diversity, and shaped by ancient and more recent colonial socio-political histories. Kalandhika's and Hien's histories are also shaped by colonisation, although Hien's is shaped by Chinese, French and American, rather than British, forms of colonialism. As Hien and Kalandhika worked together on sewing-based activities, they began quietly speaking about Muslim people. I heard Hien explain, '*No Asians are [Muslims]*', responding '*There's lots of Asian Muslims*'. From another conversation, Ashmeet asked, '*Asian Muslims?*', whilst Hien simultaneously responded to Kalandhika, '*Well, like me*', referring to her Vietnamese heritage and Buddhist faith. I replied to Ashmeet, '*Some people call Indian people Asian people*,' to which Deepti responded, '*We are Asians*'.

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[7] Also referred to as Persian by some Iranian Farsi speakers.

[8] Offered as extracurricular programmes by both public and community providers in nearby locations.

[9] I use Rangsey's naming of his parents' home country here, which was re-named by military decree in 1989 to Myanmar.

Multilingual Literacies

In producing bilingual materials for younger peers, Rangsey and Nuralain, Ashmeet and Afaf independently transliterated their respective Falam-Chin, Arabic, Punjabi and Farsi texts using Latin script, with researchers facilitating an Arabic script version of Nuralain's procedure. Rangsey's mother '*laughed […] a happy laugh*' when he shared his bilingual procedure with her, and Ashmeet's mother, whilst approving of the bilingual texts, wondered why it hadn't been done before. Hien provided the Vietnamese text for her procedure in the Latin-based orthography Quốc Ngữ with occasional support from a class teacher who shared her home language.

Kalandhika and Deepti sought out family members for written language support for their oral knowledge of Tamil and Hindi, respectively. Deepti worked with her family to create her Hindi text in Devanagari script. Kalandhika worked with her mother, who at times found the process '*hard*', to transliterate her Tamil text in Latin script. Researchers facilitated a Tamil script version. Tamil and Devanagari scripts are essentially syllabic (or more accurately, abugidas).

Emnet's family spoke Amharic, a Southern Semitic language that he understood but did not speak or write. Talking about writing his procedural text, he told me writing in Amharic was '*really difficult*' as he '*couldn't find the right typing [...] language*', referring to its writing system, modified from the Ethiopian syllabary. His teacher suggested using Italian as a solution to this challenge, and offered him Italian language support.

Like Emnet, Tyler produced his text in English and an additional language learnt at school, accessing support from his Japanese teacher. When I asked if he would change anything about his book-making experience, Tyler responded,

> *I'd probably want to do it in a different language […] because […] my Mum speaks French and Hungarian and bits and pieces of Italian, my grandparents came from France and Hungary, my step-dad speaks Hungarian.*

Kaihautu did not speak his family language either because '*when I was born we stayed there [New Zealand] for one year and then came to Australia*'.

He compared this to his peers' experiences of their family languages, offering, '*Cos some of them were born there and stayed there for a long time*'. Kaihautu questioned *'the point'* of writing his procedure in Māori, given he and his upper-primary siblings were the only Māori family at the school. Regardless, he wrote his procedure in Māori and English, using '*Google*' rather than family support to provide the Māori text for his book.

This section has visually and narratively represented the students' storied performances of their schooling and family lives, making visible more holistic views of their diverse cultural backgrounds, lived experiences and language literacies. Also made visible are the ways in which students' family relations and socio-political histories shape their multilingual lives, and the relation-making and identity work they undertake at school.

Students' Knowledge Interests in the Making Space

This section pictures and narrates students' knowledge interests in the making space. Figure 10.2 is structured by the extension unit's planned technical (digital storytelling, book publishing and crafting experiences), practical (junior primary students learning school routines) and critical (developing home and school language literate identities) knowledge interests. It additionally maps students' knowledge interests they agentically enacted whilst making.

Learning About the Way the World Works: Technical Interests

Some students' choices of school routines for their procedural texts evidenced their technical knowledge interests. Nuralain and Afaf made *How to Wash Your Hands* books, with Nuralain explaining '*The kids needed to learn to get all the germs off their hands*'. Deepti added '*Some kids don't really wash their hands when they come out of the toilets*', highlighting the social or practical needs such empirical interests address. Ashmeet and
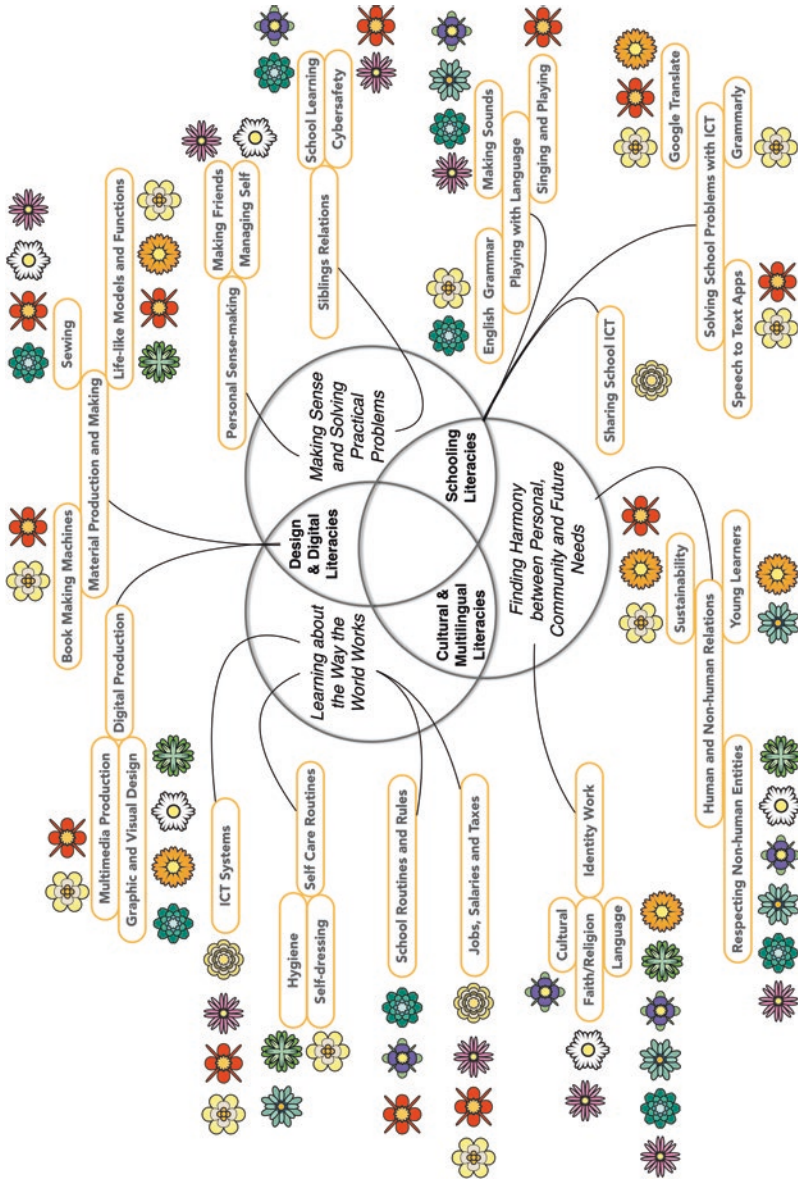
Fig. 10.2 Designed and agentic knowledge interests enacted in the making space

Deepti wrote *How to Get Ready for the School Day* and Kaihautu *How to Get Ready for Home* procedures, each focusing on regulated-process knowledge younger students need in order to transition to school. Emnet's *How to Tie Your Shoe Laces* procedure also focused on technical process, whilst addressing a practical need. He noted '*I see a lot of children struggling and asking me to tie their shoelaces, so this could help*'.

Material making engaged students' technical interests. Deepti made a miniature backpack, water bottle, fruit and reader bag as part of her procedure activity, sharing that making was what she enjoyed most about the extension unit, '*Cos' I've never done making before like this*'. Deepti, along with Kalandhika, Hien and Kaihautu, used sewing skills to make parts of their activity. They shared diverse, yet similar, cultural sewing literacies. Kaihautu was interested in creating authentic function within his play-based activity. Afaf built a three-dimensional bathroom and sink for her activity. Keenly interested, Kaihautu tested the tap she had made '*to see if it actually worked*'. Emnet, too, considered authenticity in his design thinking, wondering about an outer layer of leather and actual shoelaces to give his activity '*a realistic feel*'.

Digital making processes engaged students' material technical interests. Kaihautu and Emnet were interested in the machines used to produce print versions of their *How To …* books. Emnet described his extension unit highlight as, '*Playing with that thing down there [the binding machine] and the laminator*', building on his engagement with producing his digital book, '*Editing it – the fonts, add backgrounds, it was cool adding images and taking photos*'. Kaihautu and Emnet used digital production skills to incorporate Italian and New Zealand national colours into their books' visual designs. Hien, Afaf, Deepti and Tyler used technical skills to incorporate bilingual narrations into the digital versions of their books.

Students' social chat surfaced further technical interests, creating opportunities for information-seeking. Kalandhika, Emnet and Kaihautu were talking around the wet area's central table. Kalandhika said '*Yesterday our Internet went off*'. From the bench, Rangsey interjected, '*I can't live with lag*'. Emnet suggested his Telstra[10] access meant '*the Internet is really*

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[10] An Australian telecommunications provider.

fast'. Kalandhika shared '*We have NBN*'[11]. Emnet asked '*What's so good about NBN?*' and Kalandhika explained, '*It has fast networks*', with Emnet reiterating to me, '*Wait, what is so good about NBN?*'. As I modelled about-to-be-obsolete ADSL (running on twisted-pair cable) and NBN (running on fibre optic cable) networks using different coloured wools, Kaihautu wondered if you had to lay the cable yourself, and Emnet asked about the difference between Telstra and the NBN. Kalandhika said her dad worked with fibre optic cable.

Kaihautu was interested in Kalandhika's dad's job, asking '*Do you get good money for it?*'. Rangsey added, '*Dentists, I think they get paid two million dollars a year*', whilst Emnet asked, '*Why do we have to have taxes?*' and Kaihautu said, '*Hospitals, if you work in a hospital, you get paid lots of money*'. I explained taxes were used by the government to pay for things like the NBN, roads and hospitals. Emnet told us about a recent trade of a soccer player, saying '*He would get $400,000 a week, I thought it was a lot but when I heard about taxes, he would only get half*'.

Making Sense and Solving Practical Problems: Practical Interests

Hien and Kalandhika chose procedural topics related to their practical knowledge interests. Kalandhika explained the impetus for her *How to Make Friends* procedure: '*I found a few kids that were not with any of their friends*'. Hien's *How to Keep Calm* procedure guided younger students through a short meditation to relax their bodies and calm their brains. Deepti's and Ashmeet's books and activities reflected their relations with younger siblings, with Ashmeet sharing, '*I'm going to make sight words, 'cos my sister has sight words in Reception*' and Deepti responding, '*My sister is going to preschool, she's coming to school next year in July*'.

Emnet, Kaihautu and Tyler's digital interests provided them with practical solutions to producing their bilingual texts, each using *Google Translate*. For Kaihautu, using *Google* for Māori language support was unproblematic. Tyler initially did not disclose he used *Google Translate* to

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[11] National Broadband Network.

produce his Japanese text, but when 'outed' by a peer offered '*I mainly used Google Translate. She [the Japanese teacher] made a few corrections because I don't think Google Translate always gets it righ*t'. Emnet was also 'outed' by a peer, but maintained across multiple conversations he only relied upon his Italian teacher.

Students' technical interests in language informed their thinking about practical interests. Deepti shared, '*I'm known for grammar mistakes, I am good at writing, coming up with ideas but its grammar*'. Emnet responded, '*Yes, that's why me and my brother have Grammarly on our Macs*'. Kaihautu told me, '*I actually don't like writing at all*'. He and Emnet were enthusiastic about the idea of software to translate spoken words into written text, simultaneously telling me such functionality would be '*soooooo much easier*' and '*so good*'. Otherwise disengaged with procedural writing, when homemade playdough became the topic of conversation Kaihautu confidently orated the procedural text, responding, '*You need flour, salt and water*'.

Kaihautu's practical interests extend to social problem-solving. Kalandhika, talking about her younger relatives' problematic technology relations, told us, '*They never come outside, most of the time they are stuck in the game*'. Kaihautu, admitting he was often banned from PlayStation due to '*playing it when I'm not supposed to*', offered the pragmatic advice, '*Take the game outside, or get them Pokémon GO, 'cos then they're going to have to go outside*'. When Emnet complained that his mum '*watches You Tube all the time, it gets annoying*', Kaihautu queried him '*What, she's on the Ipad or whatever all day, so you could do whatever you want?*', which made Emnet reconsider his claim, '*Not all day, usually just about an hour*', with Kaihautu confirming with him, '*So, not long*'.

Kaihautu's sense making involved music and song. When my phone rang during making, he began singing an alliterated version of my ringtone, perfectly replicating its rhythm and melody. Looking at Kalandhika's playground activity, he asked '*Why do they call it a slippery dip*?'. Emnet suggested, '*Because it's slippery*?' and Kaihautu responded, '*Dipping is when you go up and down, or down and then up, maybe you go down and then you have to go back up*', the rhythm of his voice matching the motion he was making with his hands. Emnet concluded, '*It just sounds nice for kids that's all*'. Whilst Emnet's answer did not satisfy Kaihautu, he looked

pleased when the group began avidly swapping stories of a large slippery dip at a favourite playground.

Students used unfamiliar vocabulary and sought English language support whilst making. When Kalandhika asked for a '*colour suggestion*' for her activity, her peers did not understand her. I repeated '*suggestion*', modelling the mouth and tongue positions for the 'j' sound in the middle. After practicing this sound, she said '*Sometimes I try to say words, that I know, but I can't really […] my tongue just gets twisted*'. I shared my difficulty making the 'throat' sounds of Farsi. Nuralain, naming these as Arabic sounds, demonstrated it and said '*It's easy for me*'. I introduced the 'rolled r' or alveolar trill found in many languages. Students broke out in a cacophony of 'rolled r' sounds. Later, Ashmeet and Deepti interjected in a synchronised chorus to correct my English pronunciation of the Hindi 'u' or 'oo' sound in 'puja/pooja', repeating it until I could replicate the sound to their satisfaction. Later again, Deepti asked '*Should I sew this?*' (pronounced to rhyme with 'few') followed by '*So, swa, I don't know?*'. Ashmeet modelled '*Sew, sew*' for her.

Finding Harmony Between Personal, Community and Future Needs: Critical Interests

Some students' choices of procedural topics blended practical and critical interests. Rangsey's *How to Use the Laptop Fairly* procedure addressed the problem of sharing limited numbers of laptops between students, offering a method of fair or equitable sharing. Tyler's *How to Recycle* procedure was driven by his interest in sustainability, his involvement in a local parish schools' Green Day Out program, and his school's collection and recycling of drink containers as a means of raising funds. Nurlain's *How to Wash Your Hands* procedure considered ways to communicate practical and technical knowledge to a younger audience. It instructed her audience to '*rub your hands together until the soap becomes bubbly*' and keep rubbing them together '*while you sing 'happy birthday' to yourself',* rather than designating a period of 'clock' time.

Students' conversations during making demonstrated further critical interests. After Emnet and Kaihautu enthused over the idea of speech-to-text software, Rangsey suggested it was '*the lazy way*'. When I asked '*Or [is*

it] just the new way with technology?', Kaihautu responded, '*Well, if we keep using paper the trees will die*'. His concern for trees mirrored female students' concerns over a fly that had been killed in the making space. When I asked them, '*Would you kill a fly?*', they each said, '*No*', with Nuralain saying '*They are animals, living things*', and Ashmeet saying '*Flies are a thing of nature, when they get annoying you would swat them but wouldn't kill them*'. Deepti connected these positions to students' dietary practices, asking, '*Is anyone a vegetarian, are you a vegetarian?*'

Students' critical interests were interwoven with their cultural and home language literacies. Ashmeet, when asked about producing her bilingual text, proudly asserted, '*I did mine by myself because I speak my languag*e'. When guided to be careful using a sharp knife, she responded '*Don't worry, I am used to sharp objects and fire*'. Kalandhika and Ashmeet indicated at times it was easier doing things in home language. Kalandhika mused, '*I kind of like speaking my language […] to speak two languages*' and Ashmeet responded, '*I speak three*'. Deepti said of her home language Hindi, '*I speak it fluently*'. Tyler shared his connection to his language knowledge, saying, '*I'm a bit weird, I like doing English, it's one of my best subjects, so I like writing things*'. Kalandhika reflected on her name, '*My mum gave me the name because of god, Saraswati, she is the goddess of art and I think music […] I am good at music*'. Kalandhika taught me how to spell and pronounce her name, testing me until she was satisfied with my Tamil learning.

This section has attended to participating students' agency in the making space. It makes visible the diversity of the extension unit knowledge interests with which the students engaged, and emergent interests and information-seeking they enacted.

Pre-Enchanting Diverse Students in Secondary School Learning

Participating students actively engaged in conceptualising their worlds and considering agentic actions they might wish to take (Checkland, 1999a). They showcased multiplicitous cultural and linguistic repertoires within otherwise monolingual schooling (French & Armitage, 2020) and

attested to the senses of accomplishment they took from them. Students told of how migration timing and circumstance shape their home and subsequent language literacies and they demonstrated their attachment to family and cultural languages, regardless of whether they could understand, speak, read and/or write those languages. Making with caritas and empathetically listening and perceiving established creative, multimodal and non-linear ways of learning, and instructional and conversational exchange capable of narrating students' cultural realities and authentic lifeworlds (Yunkaporta, 2009, p. 21). Such attention to multimodal and multilingual tellings are a 'most important foundation for successful multilingual learning' (French, 2016, p. 301).

Critical to students' agentic telling of their stories was the making space's 'policy-in-action' (French, 2016), which listened to and engaged with students' multilingualism, translanguaging and code-switching practices (Canagarajah, 2012). Initially, students largely spoke English in my presence. If they noticed me listening to their occasional translanguaging, they quickly reverted to English. If peers noticed me listening to other students' translanguaging, they would admonish the speaker to revert to English. Despite repeated reassurances, it was not until students saw me as 'a learner' and 'a co-producer of knowledge' (Farrelly & Nabobo-Baba, 2014, p. 323) that students, in the first instance Ashmeet and Afaf, were willing to challenge the apparent 'English-only' classroom norm and openly use their home or subsequent languages in the space.

Monolingual 'English only' norms are widespread and persistent within Australian schooling policy and teaching approaches (Liddicoat, 2013, as cited in French & Armitage, 2020). Participating students' eventual challenging of these norms highlights the criticality of attending to the influence of power dynamics on knowledge exchange (Farrelly & Nabobo-Baba, 2014, p. 323). Adopting multilingual classroom practices can address such dynamics and support students' schooling success. Students took pride in their multilingual literacies, noting '*it was easier sometimes doing [school] things*' in home language. Building students' home language literacies is foundational to their school language literacies (Heugh et al., 2019, p. 28), whilst learning area content delivered in home language builds students' access to academic content and school language learning (Haynes, 2007, pp. 21–22).

Despite the extended periods of time it can take multilingual students to acquire school language (Haynes, 2007; Heugh et al., 2019), federal and state-level Australian education policies implement short-term and monolingual English language learning programmes for adolescent refugee and migrant students. Programme funding is grossly inadequate compared to multilingual students' English language acquisition needs (Matthews, 2021, pp. 727–728), whilst programme designs isolate newly arrived students from school language-speaking peers, and create exclusionary learning contexts within schools (French, 2016, pp. 300–301). Mapping students' cultural and linguistic knowledge and experiences (Fig. 10.1) has showcased their understanding of 14 Asia Pacific languages in addition to their school language. School community members spoke 40 different home languages. In this, and many other Australian schools, however, there is no intersection between families' and students' multilingualism and mandated 'Languages Other Than English' curricula.[12]

Where multimodal and empathetic relations within the space attended to the politics and lived experiences of their multilingualism, students articulated emergent identities, knowledge interests and informational needs through, rather than regardless of, their prior experiences (Hattam & Every, 2010). Participating students' interests (see Fig. 10.2) spanned learning areas such as English (Deepti, Emnet, Tyler and Kaihautu on writing and grammar), Humanities and Social Sciences (Afaf on Pakistan, Hien and Kalandhika, Ashmeet and Deepti on 'Asian Muslims', Tyler on sustainability), Science (Nuralain and Afaf on germs and hygiene, Ashmeet on fire and sharp things), Design (Afaf, Emnet, Kaihautu on aesthetic and functional design) and Digital Technologies (Rangsey, Emnet and Kaihautu). Beyond mandated curricula, students demonstrated personal knowledge interests and information-seeking through social connections that included topics such as managing younger siblings, future work opportunities, ways to leverage schooling success, the languages they spoke and their own and peers' cultures and faiths.

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[12] Australian schools typically offer additional language learning as a discrete subject, with many of these languages, including Indonesian, Japanese, Italian, Greek, French and German, reflecting past waves of European migrations or Asia Pacific foreign relations.

For these students, future learning and economic opportunities can transform personal, family and community experiences of socio-economic disadvantage. In their, and similarly disadvantaged, communities residents often hold lower levels of post-secondary qualifications, and individuals and family households experience significantly higher rates of unemployment than national and state averages (ABS, 2016). Young refugee and migrant students' future education and employment trajectories are mediated by such disadvantages, but also by the bridging capital and broader social networks that engagement in schooling affords (Nunn et al., 2014). The students informing this research, for example, built social relations with peers through shared cultural and linguistic repertoires, knowledge interests and information needs.

Understanding students' identity work, knowledge interests and information-seeking is a necessary precursor to considering designs for systems change (Checkland, 1999a). This change is urgently needed to ensure all students can access socially just education (Heugh & Stroud, 2018; Matthews, 2021; Rigney, 2021) at increasingly complex cultural interfaces. Critical and creative systems analysis provides ways to think-in-images or imagine new schooling designs. Such imagining work enables the remaking of schooling experiences for migrant and refugee students (Soong & Comber, 2017). Here, it has made visible a more complex, and therefore more holistic, view of a particular group of students' lifeworlds. These necessary precursory understandings are accessible where students feel safe to critically reflect and act thoughtfully on their understandings (Wallace et al., 2005).

This analysis of culturally diverse multilingual students' agency asks us to consider what is absent but necessary, as well as what is emergent in diverse schooling contexts (Matthews, 2021). It asks us to imagine future schooling designs that work to sustain students' cultural, social and schooling relations through multimodal processes of multilingual communicative practices and authentic language and literacy learning. It asks us to imagine schooling as integrated and community-connected inquiry, which privileges and makes narratable students' cultural epistemologies, linguistic knowledges and socio-political histories, and centres their knowledge interests and information needs in learning designs and knowledge co-creation. In such re-imagined schooling, safe webs of

relations can be woven to pre-enchant all emerging adolescent students in secondary schooling and future work learning opportunities.

Schooling designs capable of pre-enchanting must engage students, educators and families in reciprocal and ongoing empathetic relations, within which creative, embodied and multimodal learning is primary. Designs must support students to undertake cultural, social and personal identity work, and leverage their relational pursuit of knowledge interests and information needs through their cultural and multilingual literacies. Socially just and pre-enchanting schooling designs privilege multilingualism, rather than monolingualism, and integrate intersecting evidence from diverse disciplinary research.

These requirements spotlight the (in)efficacy of current Australian schooling designs in which accountability principles are implemented through standardised testing (Klenowski & Wyatt-Smith, 2012). For example, these evaluation designs consider students' linguistic backgrounds, but not the multilingualism of the schools' surrounding community. Similarly, the Australian teaching workforce's cultural and linguistic diversity, competencies and skills remain largely uncharted and ignored within Australian teaching standards and are not analysed alongside data collected about students' diversity in school evaluations. Yet socially just education must be education capable of narrating students', families', educators' and communities' diverse lifeworlds.

This capability must be present not only in individual schools, teaching teams or educators, but also in broader education governance and reporting systems. Imagine if evaluation designs mapped the cultural and linguistic repertoires of the students, families, educators and school communities whom schooling is intended to serve. Imagine how such information and understanding could be used to plan for relational and integrated home and school language learning programmes to sustain and centre students', families' and communities' multilingualism within schooling. Persistent streams of Australian Indigenist and culturally responsive education research continue to present more complex understandings of students' cultural, linguistic and socio-economic experiences and evidence of the ways socially just education can proceed. Yet, these approaches are only now 'emergent in school pedagogies of teaching and learning' (Rigney, 2021, p. 579).

Pre-enchanting students in secondary learning and transforming diverse schooling urgently requires more imaginary thinking, rather than existing remedial and additive approaches to policy (Matthews, 2021). Where critical systems theories provide for creative and pictured approaches to systems design, they make it possible to think through and narrate monolingual status quo schooling configurations that perpetuate educational inequality and leave individual schools, teaching teams or educators bearing sole responsibility for enacting more socially just education in defiance of system policy. These structures presume educators' caritas and mask and absent their cultural and linguistic repertoires. In doing so these structures consume educators' caritas and cultural and linguistic repertoires as volunteer and unpaid labour, and amplify the risk of disenchanting rather than pre-enchanting already vulnerable students with equitable futures.

Conclusion

The relation-making, identity-building and information-seeking that participating students undertook, subsequently pictured and narrated here, counters broader deficit narratives about migrant and refugee students' schooling experiences (Soong & Comber, 2017; Wrench et al., 2017). Students' agency recommends strategies to pre-enchant and pre-engage emerging adolescents in secondary schooling. Such strategies require creating culturally safe spaces which enact caring and embodied ways of knowing that acknowledge multilingual and translanguaging practices and listen to diverse articulations of schooling and informational needs. In this case study, integrated arts-based and digital pedagogical designs provided authentic learning experiences and empathetic spaces, in which possibilities for pre-enchanting culturally diverse learners in secondary learning and future work opportunities were made visible.

Attending and attuning to these possibilities allowed a reimagining of education policy and systems capable of 'privileging Indigenous [and therefore all] voices, upholding integrity of cultural knowledges to resist hegemony, and empowering self- determination' (Rigney, 2021, p. 579). For the cohort of early adolescent students who participated in this research, integrated arts-based approaches provided them with trusted

spaces in which they could explore identity, social relations and emancipatory action. Within co-created stories of their cultural and linguistic lifeworlds, they explored cultural, community and personal identities, established new and extended social relations with peers, articulated technical, practical and critical knowledge interests, and demonstrated interest about employment structures.

Synthesising students' stories using critical and creative systems analysis methods created more holistic understandings of the requirements of socially just schooling in diverse communities. These analyses of diverse schooling experiences in Australia, whilst only ever partial and incomplete views, re-imagine education as ongoing, sustained and relational engagement enacted through multilingual, multimodal, and culturally and linguistic inclusive policies, pedagogies, processes and resourcing. In such schooling designs, diverse young students can be pre-enchanted, rather than re-enchanted (Smyth et al., 2010), with impending secondary schooling learning and future work opportunities.

References

ABS. (2016). *2016 Census of population and housing, general community profile (Catalogue 2001.0)*. Commonwealth of Australia. Retrieved August 4, 2021, from https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/2016%20Census%20Community%20Profiles

ABS. (2017). *2016 Australia census of population and housing: Understanding the census and census data (Catalogue 2900.0)*. Commonwealth of Australia. Retrieved August 4, 2021, from https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2900.0main+features100622016

ABS. (2018). *Socio-economic indexes for Australia (SEIFA), 2016 (Catalogue 2033.0.55.001)*. Commonwealth of Australia. Retrieved August 4, 2021, from https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~SEIFA%20Basics~5

ACARA. (2019). *Technical report 2019: Approach to reporting on My School*. Commonwealth of Australia. Retrieved August 20, 2021, from https://www.myschool.edu.au/media/1836/techncial-report-2019-approach-to-reporting-on-my-school.pdf

ACARA. (2020). *Guide to understanding the Index of Community Socio-Educational Advantage (ICSEA)*. Commonwealth of Australia. Retrieved

August 20, 2021, from https://www.myschool.edu.au/media/1820/guide-to-understanding-icsea-values.pdf

Atkinson, J. (2002). *Trauma trails, recreating song lines: The transgenerational effects of trauma in Indigenous Australia*. Spinifex Press.

Boje, D. M. (2006, May 4–6). *It is time to set story free from narrative prison!* Paper presented to the 2nd International Congress of Qualitative Inquiry, Urbana-Champaign, IL.

Canagarajah, S. (2012). *Translingual practice: Global Englishes and cosmopolitan relations*. Routledge.

Checkland, P. B. (1999a). Systems thinking. In W. L. Currie & B. Galliers (Eds.), *Rethinking management information systems*. Oxford University Press.

Checkland, P. B. (Ed.). (1999b). *Systems thinking, systems practice: Including a 30 year retrospective*. Wiley.

Correa-Velez, I., Gifford, S. M., McMichael, C., & Sampson, R. (2017). Predictors of secondary school completion among refugee youth 8 to 9 years after resettlement in Melbourne, Australia. *Journal of International Migration and Integration, 18*(3), 791–805. https://doi.org/10.1007/s12134-016-0503-z

Cranny-Francis, A. (2008). From extension to engagement: Mapping the imaginary of wearable technology. *Visual Communication, 7*(3), 363–382. https://doi.org/10.1177/1470357208092325

D'warte, J. (2015). Building knowledge about and with students: Linguistic ethnography in two secondary school classrooms. *English in Australia, 50*(1), 39–48.

Darvin, R., & Norton, B. (2014). Transnational identity and migrant language learners: The promise of digital storytelling. *Education Matters: The Journal of Teaching and Learning, 2*(1), 55–66.

Edwards, B., & Bromfield, L. M. (2010). Neighbourhood influences on young children's emotional and behavioural problems. *Family Matters, 84*, 7–19.

Eldershaw, L. P., Mayan, M., & Winkler, A. (2007). Through a painted window: On narrative, medicine, and method: Interview with Arthur W. Frank, conducted November 16, 2005. *International Journal of Qualitative Methods, 6*(3), 121–139.

Farrelly, T., & Nabobo-Baba, U. (2014). Talanoa as empathic apprenticeship. *Asia Pacific Viewpoint, 55*(3), 319–330. https://doi.org/10.1111/apv.12060

Ferfolja, T., & Vickers, M. (2010). Supporting refugee students in school education in Greater Western Sydney. *Critical Studies in Education, 51*(2), 149–162. https://doi.org/10.1080/17508481003731034

Freire, P. (1983). *Pedagogy of the oppressed*. Continuum.

French, M. (2016). Students' multilingual resources and policy-in-action: An Australian case study. *Language and Education, 30*(4), 298–316. https://doi.org/10.1080/09500782.2015.1114628

French, M., & Armitage, J. (2020). Eroding the monolingual monolith. *Australian Journal of Applied Linguistics, 3*(1), 91–114. https://doi.org/10.29140/ajal.v3n1.302

Georgiou, I. (2007). *Thinking through systems thinking*. Routledge.

Godhe, A.-L., Lilja, P., & Selwyn, N. (2019). Making sense of making: Critical issues in the integration of maker education into schools. *Technology, Pedagogy and Education, 28*(3), 317–328. https://doi.org/10.1080/1475939X.2019.1610040

Habermas, J. (2005). Knowledge and human interests: A general perspective. In G. Gutting (Ed.), *Continental philosophy of science* (pp. 310–321). Blackwell.

Hammond, D. (2003). *The science of synthesis: Exploring the social implications of general systems theory*. University Press of Colorado.

Hattam, R., & Every, D. (2010). Teaching in fractured classrooms: Refugee education, public culture, community and ethics. *Race Ethnicity and Education, 13*(4), 409–424.

Haynes, J. (2007). *Getting started with English language learners: How educators can meet the challenge*. ASCD.

Heugh, K. (2014). Turbulence and dilemma: Implications of diversity and multilingualism in Australian education. *International Journal of Multilingualism, 11*(3), 347–363. https://doi.org/10.1080/14790718.2014.921180

Heugh, K., & Stroud, C. (2018). Diversities, affinities and diasporas: A southern lens and methodology for understanding multilingualisms. *Current Issues in Language Planning, 20*(1), 1–15. https://doi.org/10.1080/14664208.2018.1507543

Heugh, K., French, M., Armitage, J., Taylor-Leech, K., Billinghurst, N., & Ollerhead, S. (2019). *Using multilingual approaches: Moving from theory to practice. A resource book of strategies, activities and projects for the classroom*. UK British Council.

Hirschheim, R., Klein, H. K., & Newman, M. (1991). Information systems development as social action: Theoretical perspective and practice. *International Journal of Management Science, 19*(6), 587–608.

Kajamaa, A., & Kumpulainen, K. (2020). Students' multimodal knowledge practices in a makerspace learning environment. *International Journal of Computer-Supported Collaborative Learning, 15*(4), 411–444. https://doi.org/10.1007/s11412-020-09337-z

Klenowski, V., & Wyatt-Smith, C. (2012). The impact of high stakes testing: The Australian story. *Assessment in Education: Principles, Policy & Practice, 19*(1), 65–79. https://doi.org/10.1080/0969594X.2011.592972

Lanzara, G. F. (1983). The design process: Frames, metaphors and games. In U. Briefs, C. Ciborra, & L. Schneider (Eds.), *Systems design for, with and by the users* (pp. 29–40). North-Holland Publishing Company.

Lenette, C. (2019). *Arts-based methods in refugee research: Creating sanctuary*. Springer.

Luchs, M., & Miller, E. (2016). Not so far away: A collaborative model of engaging refugee youth in the outreach of their digital stories. *Area, 48*(4), 442–448. https://doi.org/10.1111/area.12165

MacGill, B. (2019). Craft, relational aesthetics, and ethics of care. *Art/Research International: A Transdisciplinary Journal, 4*(1), 406–419. https://doi.org/10.18432/ari29413

Martin, K. (2008a). The intersection of Aboriginal knowledges, Aboriginal literacies, and new learning pedagogy for Aboriginal Students. In A. Healy (Ed.), *Multi-literacies and diversity in education* (pp. 58–81). Oxford University Press.

Martin, K. (2008b). *Please knock before you enter: Aboriginal regulation of outsiders and the implications for researchers*. Post Pressed.

Martin, K., & Mirraboopa, B. (2003). Ways of knowing, being and doing: A theoretical framework and methods for Indigenous and Indigenist re-search. *Journal of Australian Studies, 27*(76), 203–214. https://doi.org/10.1080/14443050309387838

Matthews, J. (2008). Schooling and settlement: Refugee education in Australia. *International Studies in Sociology of Education, 18*(1), 31–45. https://doi.org/10.1080/09620210802195947

Matthews, J. (2021). Maligned mobilities, absences and emergencies: Refugee education in Australia. *International Journal of Inclusive Education, 25*(6), 720–734. https://doi.org/10.1080/13603116.2019.1569168

McGrath, K. (2005). Doing critical research in information systems: A case of theory and practice not informing each other. *Information Systems Journal, 15*(2), 85–101. https://doi.org/10.1111/j.1365-2575.2005.00187.x

McLean, S. (2016). *The effect of trauma on the brain development of children*. Child Family Community Australia (CFCA) Practice Resource June 2016. Australian Institute of Family Studies.

Moll, L. C., & González, N. (1997). Teachers as social scientists: Learning about culture from household research. In P. Hall (Ed.), *Race, ethnicity, and multi-culturalism: Policy and practice* (pp. 89–114). Garland.

Nabobo-Baba, U. (2008). Decolonising framings in Pacific research: Indigenous Fijian Vanua Research Framework as an organic response. *AlterNative: An International Journal of Indigenous Scholarship, 4*(2), 140–154.

Nabobo-Baba, U. (2012). Transformations from within: Rethinking Pacific Education Initiative. The development of a movement for social justice and equity. *The International Education Journal: Comparative Perspectives, 11*(2), 82–97.

Nakata, M. (2007). *Disciplining the savages: Savaging the disciplines*. Aboriginal Studies Press.

Nunn, C., McMichael, C., Gifford, S. M., & Correa-Velez, I. (2014). 'I came to this country for a better life': Factors mediating employment trajectories among young people who migrated to Australia as refugees during adolescence. *Journal of Youth Studies, 17*(9), 1205–1220. https://doi.org/10.1080/13676261.2014.901496

Paige, K., O'Keeffe, L., Geer, R., MacGregor, D., & Panizzon, D. (2019). Using artefacts to articulate teachers' perceptions of STEM. *Teaching Science, 65*(1), 48–54. https://doi.org/10.3316/aeipt.222771

Pendergast, D. (2009). The success of middle years initiatives: Some important considerations. *Professional Voice: Journal of the Australian Education Union, 6*(3), 13–19.

Pendergast, D., Main, K., & Bahr, N. (Eds.). (2017). *Teaching middle years: Rethinking curriculum, pedagogy and assessment* (3rd ed.). Allen & Unwin.

Phinney, J. S., Romero, I., Nava, M., & Huang, D. (2001). The role of language, parents, and peers in ethnic identity among adolescents in immigrant families. *Journal of Youth and Adolescence, 30*(2), 135–153.

Rankin, J., Garrett, R., & MacGill, B. (2021). Critical encounters: Enacting social justice through creative and body-based learning. *The Australian Educational Researcher, 48*(2), 281–302. https://doi.org/10.1007/s13384-020-00389-6

Riessman, C. K. (1993). *Narrative analysis*. SAGE Publications.

Rigney, L.-I. (2018). Defining culturally responsive digital education for classrooms: Writing from Oceania to build Indigenous Pacific futures. In E. McKinley & L. T. Smith (Eds.), *Handbook of indigenous education* (pp. 1031–1047). Springer.

Rigney, L.-I. (2021). Aboriginal child as knowledge producer: Bringing into dialogue Indigenist epistemologies and culturally responsive pedagogies for

schooling. In B. Hokowhitu, A. Moreton-Robinson, L. Tuhiwai-Smith, C. Andersen, & S. Larkin (Eds.), *Routledge handbook of critical indigenous studies* (pp. 578–590). Routledge.

Robin, B. (2006). *The educational uses of digital storytelling*. Paper presented at the Society for Information Technology & Teacher Education International Conference.

Sheridan, K., Halverson, E. R., Litts, B., Brahms, L., Jacobs-Priebe, L., & Owens, T. (2014). Learning in the making: A comparative case study of three makerspaces. *Harvard Educational Review, 84*(4), 505–531. https://doi.org/10.17763/haer.84.4.brr34733723j648u

Skattebol, J., & Hayes, D. (2016). Cracking with affect: Relationality in young people's movements in and out of mainstream schooling. *Critical Studies in Education, 57*(1), 6–20. https://doi.org/10.1080/17508487.2015.1096803

Smyth, J., Down, B., & McInerney, P. (2010). *'Hanging in with kids' in tough times: Engagement in contexts of educational disadvantage in the relational school*. Peter Lang.

Soong, H., & Comber, B. (2017). An imagined 'haven' for refugee Muslim families: Slowly re-making the school. *International Journal of Innovation in Education, 4*(2), 89–106. https://doi.org/10.1504/IJIIE.2017.088094

Wallace, J., Rennie, L., & Venville, G. (2005). Integrating the curriculum. In D. Pendergast & N. Bahr (Eds.), *Teaching middle years: Rethinking curriculum, pedagogy and assessment* (pp. 149–163). Allen & Unwin.

Wrench, A., Soong, H., Paige, K., & Garrett, R. (2017). Building spaces of hope with refugee and migrant-background students. *International Journal of Inclusive Education, 22*(11), 1197–1212. https://doi.org/10.1080/13603116.2017.1420251

Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface.* PhD thesis, James Cook University.