Building Digital Resilience Through Effective Instructional Strategies

Emily Tucker

Victorian Skills Authority Fellowship, 2024

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Figure 1. The fellow providing digital mentoring at Carringbush Adult Education.

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02
Executive summary

In the ever-changing landscape of our globalised world, teachers are in need of innovative digital literacy instructional strategies that foster resilience and empower learners with essential skills for both daily life and employment. At the Fellow's workplace, Carringbush Adult Education, English as an Additional Language (EAL) migrant and refugee learners experience a range of barriers to employment and learning including disrupted schooling, trauma and learning disabilities. The aim of this fellowship was therefore to empower teachers and learners with the necessary tools when faced with the challenges of digital literacy. However, as opposed to a rote educational model that reflects a transmission of knowledge, these strategies intend to support the life-long approach to learning that EAL migrants and refugees need to become empowered and adaptable users of technology.

The Fellow therefore based her research around the following questions:

- What are best practice digital literacy teaching strategies?
- How can we address the socio-emotional challenges involved in teaching and learning about digital literacy?

From findings gathered, best practice digital literacy includes the following four techniques:

- Clear modelling and extensive scaffolding
- Strengths-based approach
- Celebrate success and encourage a flexible mindset

- Learner-centered instruction

In order to address the socio-emotional challenges surrounding digital literacy, it is recommended that the concept of digital resilience is explored by teachers, both within their own digital literacy practices and those of their learners.

2.1 Fellowship Context

The term digital literacy can be defined and understood in a range of ways. In a UNESCO report by Law et al., (p.6, 2018), digital literacy is defined as "the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship". It has also been asserted that the term should be relabelled as digital literacies so that the definition encompasses a more expansive meaning, given the multimodality of skills and understandings needed for application in a range of contexts (Tour et al., 2022). For example, the digital, social and language skills required to join and participate in an online English language class are different to those required when sending a text message to a friend or completing an online job application.

Other interpretations capture digital literacy through a more holistic lens of lifelong learning that goes beyond the workforce or economic needs. As per a report from the Digital Resilience in the American Workforce (DRAW) project (JFF & World Education, 2022a), the teaching of digital skills and competencies should be connected to a range of outcomes including:

- Increased literacy and language acquisition

- Improved social inclusion and integration

- Increased self-efficacy, agency, confidence and well-being

- Promotion of critical thinking

In an increasingly globalised and digitised world, digital literacy has become a crucial, ongoing and lifelong process that allows for effective participation in society (Tour et al., 2022). In the Vocational Education and Training (VET) sector, a range of digital skills have become part of course design and curriculum with a principal intention of supporting learners to become workforce ready. Digital literacy skill development is also important due to the demands of everyday life activities that have become digitised. For migrants and refugees who are navigating the settlement process in Australia, services such as Centrelink , Medicare, job searching, job reporting and housing services have become digitised. In addition to employment and everyday activities, digital skills have now become a part of the learning process. Despite these needs, research around digital literacy indicates that EAL adult migrant and refugee learners are at a disadvantage due to a lack of access to technology and limited skills required to use different types of technology (Alam & Imran, 2015). Indeed, teaching digital literacy has been compared to teaching a new language given these challenges (Adhyaru, 2019).

In the context of Carringbush Adult Education, digital literacy has become an increasingly important element of instruction. Carringbush Adult Education is a non-for-profit Registered Training Organisation (RTO) and Learn Local Organisation (LLO) that delivers EAL classes, work readiness programs and wrap-around support. Falling under the Adult, Community and Further Education (ACFE) sector, the organisation is based in Melbourne, where there is a high number of people born overseas and people who speak a first language other than English at home (Australian Bureau of Statistics, 2021). Whilst the digital needs of these learners have long existed, the COVID-19 pandemic was transformative in highlighting the importance of these needs, particularly for refugee people who

have little to no formal schooling, are pre-literate in their first language and have had little access to or experience with technology. As physical distancing regulations were imposed across the Victorian state, Carringbush Adult Education pivoted to a remote and blended model of learning. Demands for learners to access a digitised form of learning increased and teachers were required to integrate an unprecedented level of digital skills into their practice. Post-pandemic, Carringbush Adult Education continues to integrate digital literacy practices and initiatives into their program. A push-in digital literacy class is delivered once a week, whereby the Fellow is accompanied by bi-cultural and volunteer digital mentors, working with the classroom teacher to deliver lessons on digital skills. Targeted, individualised drop-in mentoring is also available for new and current students. Teachers also integrate digital literacy into their daily practices due to the range of digital tools and platforms that are now used organisation wide.

The pandemic not only shed light on the importance of digital skills for learners, but also the challenges that teachers face with technology. Whilst EAL VET educators are trained to teach the English language, they are usually not formally trained to teach it in an online setting or to teach the discipline of digital literacy, especially in a way that deals with a vulnerable group of learners such as adult migrants and refugees. The Department of Education, Skills and Employment (DESE) reported that a national survey of over 10,000 teachers in April 2020 found that 80 percent of teachers felt unprepared for the transition to remote learning. During the pandemic, the Fellow experienced this herself. Although digital literacy naturally became integrated into her lessons, uncertainty arose regarding the pedagogical practices that should be underpinning her instruction. Should she use the same practices as those used in teaching EAL? The practices learnt during her teacher training often did not apply to a digital literacy lesson. She not only felt unequipped to deal with the needs of her learners, but also felt as though the digital literacy learning experience caused stress for herself, her learners and her colleagues. These challenges were amplified when learning was being carried out

remotely during the pandemic. Moreover, whilst the professional development sessions she attended on the topics of blended learning and digital literacy were useful in giving her tools and resources to use in her practice, she felt as though there was minimal consideration given to how pedagogy should be adapted to a digital setting and the how underlying socio-emotional struggles being experienced by learners and educators should be addressed.

Understanding the complexity and significance of digital literacy is key to giving vulnerable learners the tools they need to become empowered, independent members of society. However even with this understanding, VET educators still need strategies to teach digital literacy to vulnerable adult EAL learners, aiming to provide them with lifelong skills such as problem-solving and critical thinking, essential cornerstones of digital literacy.

2.2 Fellowship methodology

A qualitative approach was taken to gather data for the fellowship. A range of activities were carried out with the aim of gaining a deep understanding of the topic and its complexities. Prior to travel in October 2022, the Fellow carried out a literature review, gaining insight into the context and gaps in the field. The ATESL 2022 Virtual conference was attended, where the Fellow was able to learn about current research and pedagogy in the areas of digital resources and blended learning. Through this research and networking with contacts in the field, the state of Minnesota, USA emerged as a central hub for innovative digital literacy practices in the sector of interest. World Education was also established as a central participant in the field, an organisation with headquarters in Boston that works to improve people's lives through educational, social and economic development programs.

Another major presence in the sector is the organisation Literacy Education and Second Language Learning for Adults (LESLLA), which supports adults who are learning to read and write for the first time in their lives in a new language. The organisation advocates for the global exchange of research findings, effective pedagogical practices and policy-related information. As the 18th annual

LESLLA symposium was scheduled for October, 2022 in Tucson, Arizona, it was decided that the Fellow would travel to the USA for her study tour. During the LESLLA symposium, the Fellow participated in workshops and sessions focusing on digital literacy and blended learning. Meetings with academics and educators who attended the conference also took place, including the team members from One America, a non-for-profit educational organisation based in Washington state.

The Fellow then travelled to Minneapolis/St Paul, Minnesota, where a range of site visits were carried out at the Adult Basic Education (ABE) centres Literacy Minnesota, Hubbs Center for Lifelong Learning, Neighbourhood House and Robbinsdale Community Education. Observations, interviews and shadowing were carried out at all sites. Following this, the Fellow visited World Education in Boston, where she interviewed some members of the EdTech Center, a global non-for-profit research partnership that aims to identify, design, implement, evaluate and promote best technology practices. The Fellow also conducted interviews with the individuals leading the DRAW project.

Figure 2. Saguaro National Park, Tucson, Arizona.

Figure 3. Minneapolis, Minnesota.

2.3 Fellow biography

Emily Tucker is an EAL teacher and Digital Mentor at Carringbush Adult Education. Most of the Culturally and Linguistically Diverse (CALD) learners at Carringbush experience a range of barriers to participation due to factors such as disrupted schooling, trauma and learning disabilities. Working in this sector has given the Fellow insight into the reality of disadvantage, how its impact can be reduced, and the effect it can have on vulnerable groups in the Victorian community. Given the importance of digital literacy in the settlement process of her learners, the Fellow is passionate about exploring avenues to enhance outcomes, whilst remaining aware of linguistic factors that influence the learning process.

Qualifications

- Master of Applied Linguistics (TESOL) (University of Melbourne)
- Certificate IV in Training and Assessment (HBA Learning Centers)
- Bachelor of Arts (University of Melbourne)

2.4 Abbreviations, Acronyms and Definitions

ABE	Adult Basic Education	DRAW project	Digital Resilience in the American Workforce project
ACFE	Adult Community and Further Education	EAL	English as an Additional Language
ACU	Australian Catholic University	Hyflex	Short for Hybrid-Flexible. This approach gives learners the choice to attend class face-to-face or online.
AMEP	Adult Migrant Education Program	LESLLA	Low-Educated, Second Language and Literacy Acquisition
ATESL	Alberta Teachers of English as a Second Language	LLO	Learn Local Organisation
Blended learning	An educational approach that combines traditional face-to face instruction with online learning activities	LWA	Lynda Wise and Associates
CALD	Culturally and Linguistically Diverse	RTO	Registered Training Organisation
CoP	Community of practice	Strengths-based model	An educational approach that focuses on the learner's strengths
Deficit model	An educational approach that focuses on the learner's deficiencies	VET	Vocational Education and Training
Digital literacy	The ability to use, navigate and understand technology	VicTESOL	Victorian Teaching English to Speakers of Other Languages
Digital resilience	The ability to adapt to challenges in the digital environment		

Figure 4. The fellow providing digital mentoring at Carringbush Adult Education.

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Fellowship Learnings and Findings:

The findings from the Fellow's research can be categorised into two parts. The first focuses on the concept of digital resilience, whilst the second focuses on strategies for best practice digital literacy.

3.1 Digital Resilience

During her initial research, the Fellow discovered the concept 'digital resilience'. Upon further reading and observation of its practical application, digital resilience became a core theme of her findings. Moreover, she found that teachers with the most effective practices identified during the site visits across the U.S seamlessly integrated the concept into their approach.

At the 18th annual LESLLA symposium in Tucson, Arizona, the EdTech Center at World Education delivered a session on the DRAW project, and the Fellow later visited the World Education headquarters in Boston. The aim of the DRAW project is to support professional development that enables teachers to be strategic and learner focused in their digital literacy lesson planning. They intend to support adult education programs in designing effective flexible technology enabled education and support services. In their report, digital resilience is defined as "having the awareness, skills, agility, and confidence to be empowered users of new technologies and adapt to changing digital skill demands…digital resilience encompasses transferable skills, self-efficacy, and a flexible mindset about technology use." (JFF & World Edcation, 2022b, p.8). At the core of a

sustainable change to these practices, lies the nurturing of individuals' abilities to develop an inner resilience. This resilience is key to steering learners away from perceiving each change they confront as disruptive. Instead, it empowers them to embrace changes as essential elements of their evolving growth and lifelong learning. This is achieved by recognizing and making meaning from patterns in one context, then applying this meaning to another context (Kop, Fournier & Mak, 2011). Findings from the project indicate that in order to support this growth, teachers need training to develop the socio-emotional learning of their students, and the implementation of effective instructional strategies and resources.

During her time at the DRAW project, the Fellow carried out interviews with the team members, who indicated that acknowledging the anxieties, challenges and frustrations that can be borne out of digital literacy practice is key to overcoming them. Teachers and learners should not be shamed for their lack of digital skills. Instead, a space that welcomes curiosity, strengths and sharing should be fostered organisation wide. For example, the Fellow joined a community of practice (CoP) during her time in the U.S, which focused on hyflex classes. During this CoP, teachers were not only given the opportunity for professional development of hyflex practices, but were also able to share the successes and challenges of their own hyflex practice. Sharing these experiences created opportunity for teachers

to provide support to others by exchanging practical solutions and approaches to problems.

Team members of the DRAW project also discussed the idea of technology undergoing constant change and evolution, posing challenges for both teachers and learners. However, by refraining from perceiving every incoming change as disruptive, learners are equipped with the tools they need to succeed and foster a growth mindset in line with lifelong learning. Members from the DRAW project also indicated that to alleviate the burden on teachers, a substantial practice needs to be implemented that is guided by principles and strategies that foster learners' confidence and capacity to learn new technologies themselves.

The Fellow interviewed World Education technical advisor Dani Scherer, regarding the role of trauma in implementing resilience building practices. She indicated that whilst resilience is the ability to persevere through challenging skill acquisition, this ability may prove difficult for learners who suffer from trauma and often react disproportionally to classroom activity. Due to its impact on the brain, trauma can manifest itself in learner behaviours including anxiety, panic, memory and recall challenges, exhaustion and disconnection (Johnson, 2018). Dani Scherer maintains that it is crucial for the teacher to understand that these responses are related to trauma in order to navigate through them effectively. She also claims that a strengths-based approach, as well as teaching and modelling emotional literacy and regulation is effective when teaching digital skills to learners impacted by trauma. This is consistent with Palanac's (2022) findings that a trauma-informed approach to language education with this group of learners is expected to foster their emotional awareness and sense of security, resulting in an improved learning environment.

3.2 Strategies for teaching digital literacy

The Fellow observed a range of effective digital literacy teaching strategies throughout her study tour, many of which were in line with a digitally resilient approach. What follows is four strategies that the Fellow observed to be most prominent and effective

during her visits to Literacy Minnesota, Hubbs Center for Lifelong Learning and Neighborhood House. Insights from interviews with staff from One America are also presented.

Clear modelling and extensive scaffolding

It is important to systematically deconstruct the target digital skills, avoiding assumptions regarding the students' familiarity with any of the steps leading to the learning intentions. This is particularly relevant for students at lower proficiency levels, where one cannot presume foundational knowledge. For example, it may be necessary to focus on identifying and tapping or clicking on the icon for a particular app before moving onto the actual use and functions of the app. The Fellow observed heightened student engagement when instructors meticulously modeled the use of technology. This involved a clear and
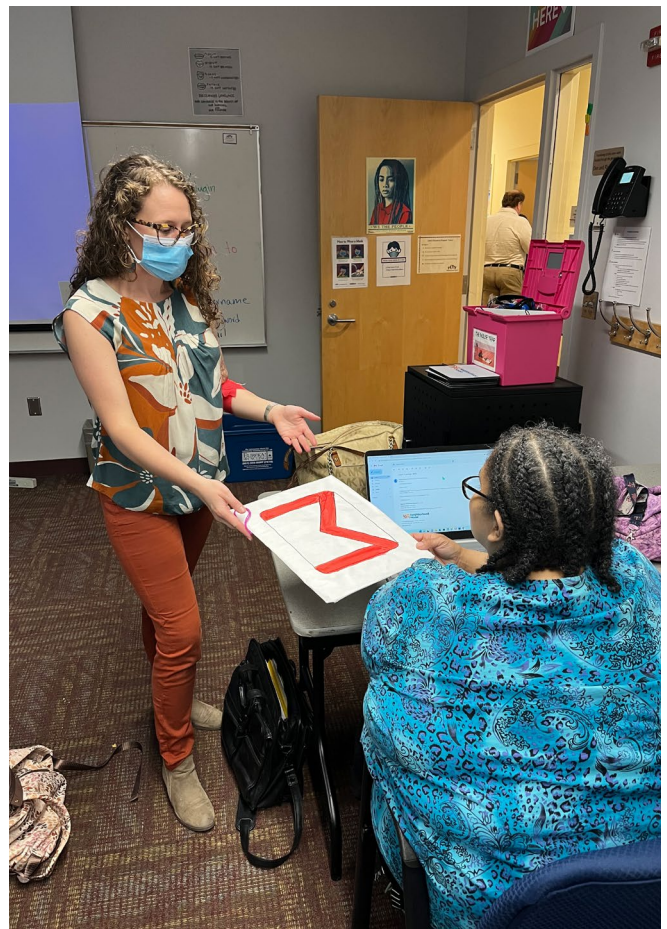

Figure 5. A teacher materializing the concept of an email to her student at Neighborhood House.

detailed presentation, including the mirroring and projection of their own device or the learners' devices for collective visibility.

Navigating digital skills with initial level learners of English can pose challenges, especially if they have little experience with technology, paired with a beginner level of English language. A good starting point for such learners involves focusing on the keyboard, presenting opportunity to integrate digital skills into the alphabet, an integral component of the EAL curriculum at the initial stage. Teachers at Literacy Minnesota and Neighborhood house used the keyboard as a starting point for their digital literacy lessons with beginner level EAL learners, and/or learners who had little experience with technology. The Fellow observed that this approach not only facilitates the repetition and consolidation of the alphabet but also cultivates the fundamental skill of typing, which is vital to using many devices.

Teachers also effectively deconstructed technological concepts to render abstract ideas tangible. An observed instructional approach at Neighborhood House involved the establishment of a designated technology corner within the classroom. This area housed disassembled pieces of technology, each labelled with relevant vocabulary. The instructor systematically dismantled an old CPU and labelled the terminology and functions associated with each component. She also started each lesson by going through the vocabulary and function of one of these old devices, providing a scaffolded opportunity for learners to build their vocabulary and transfer their knowledge to different devices. The same teacher also materialized the communicative concept of an email by handing her student a large envelope with the Gmail logo (figure 5)

Another effective method for providing clear modelling and scaffolding is use of the tool Reflector 4. Discovered during an observation at Hubbs Center for Lifelong Learning, this software was employed by a teacher to enhance the dynamism and engagement within the class. Reflector 4 offers various functions, with one of its most advantageous features being the capability to wirelessly mirror multiple devices onto

a central screen. In the class, the teacher mirrored multiple devices to his computer, which was then projected for the whole class to see, creating a collaborative content-sharing experience. By screen sharing multiple devices at the same time, the teacher was able to draw attention to different devices and operating systems, such as differences between the Apple and Android. The tool created a collaborative and engaging class, where learners became more involved as they all looked at the same device on the screen, working on a clear and contextualised digital task. This tool also eliminates the need for cables or adapters, relying instead on a stable Wifi connection that all devices must be connected to. It requires a paid subscription, however mirroring a device to a computer can be carried out at no cost through platforms such as Zoom.

Strengths-based approach

During her site visits, teachers discussed the idea that migrant refugees and learners exhibit remarkable resourcefulness and resilience in many facets of their lives, considering the diverse life experiences many of them have encountered. It is essential to shift away from a deficit model and instead leverage and enhance the existing skills, knowledge, and tools they are familiar with. In many instances, our students possess valuable insights into digital literacy, offering opportunities for reciprocal learning. The digital literacy teachers at the visited sites were able to recognize what their learners could do, acknowledge these skills, then build on them. In doing so, these educators instilled a sense of confidence in their learners, whilst encouraging them to apply and transfer these skills across various devices and platforms. During her observation at Hubbs Center for Lifelong Learning, it was clear that the practice of mirroring and projecting students' screens offered an avenue for learners to showcase their knowledge and skills to the entire class. This collaborative approach allowed students to work collectively from a familiar standpoint, demonstrating the functionality of their own devices and offering assistance to peers facing similar challenges.

Adopting a strengths-based approach is further exemplified through collaborative language groups. One America carries out first-language online digital literacy lessons for their learners, whereby learners assume the role of the teacher, leading their own classes and imparting valuable digital skills to their peers who share the same first language. This peer-to-peer collaboration not only enhances technical proficiency by removing the language barrier, but also fosters important leadership skills for the workplace.

Celebrate success and encourage a flexible mindset

Fostering a culture of celebrating success and cultivating a flexible mindset is an integral aspect of the idea of digital resilience that the DRAW project aims to promote. They claim that it is crucial to motivate learners to explore and experiment with their devices, encouraging them to troubleshoot a problem until a solution is found, which can then be celebrated by the teacher. Emphasizing that multiple approaches can be attempted in the face of challenges is essential. Moreover, by steering away from the notion of a singular "right answer," problem-solving skills can be cultivated. Members of the DRAW project claim that in order for this approach to be effective, learners and teachers should have extensive access to digital mentors who build and foster this mindset. To reinforce this notion, Deniese Cox (2023) claims that best practice for digital mentoring should include positive communication and supportive language in order to create an encouraging learning experience for the learner to thrive.

During her observations at Literacy Minnesota and Hubbs Center for Lifelong Learning, the Fellow observed teachers modelling this mindset in their own interactions with technology. When confronted with challenges, they illustrated perseverance, experimentation, and adaptability to find a solution of the problem. Even when the problem remained unsolved, they were able to demonstrate self-awareness, self-control, and self-directed learning. These skills contribute to the development of important interpersonal skills applicable in professional and everyday contexts. At the end of the lesson, the teacher at Hubbs Center for Lifelong Learning also incorporated reflection as an effective method to celebrate success and acknowledge the learners' achievements of the lesson.

This same teacher exemplified a flexible mindset through the think-aloud strategy. While troubleshooting a technical issue in class, the teacher articulated their internal thought process, engaging learners and dismantling the notion of the teacher possessing all-encompassing knowledge. This strategy demonstrated to learners how to problem-solve, think critically and transfer digital skills, all while fostering a more communicative language environment. The modelling of problem-solving or troubleshooting was a key finding, as it demonstrated the way the teacher interacts with the learners when encountering a digital problem.

Learner-centred instruction

This approach places emphasis on the choices, relevance and motivations of the learners. Recognizing the contextual significance of the skills being taught is crucial. Teachers across the sites indicated that learning can be contextualized for learners by connecting it to a social purpose. For example, when practising the keyboard, one teacher concluded the lesson by having learners type and send a simple text message.

For many learners, especially at the initial digital literacy learning stages, acquiring a comprehensive understanding of their mobile phones may be more pertinent than learning about computers. For example, at Hubbs Center for Lifelong Learning, the teacher was made to pivot his class from a computer focus to a mobile phone focus to suit the immediate needs of the learners. For most LESLLA learners with little experience with technology, learning the use and function of their phones is more relevant to their everyday lives than learning about computers. He therefore adjusted the intention of the lesson to suit the needs of the learners and the dynamic nature of technology.

We can encourage self-directed, independent learning by allowing learners to choose the topic and pace of their study. Two platforms that the Fellow encountered during her research are Northstar Digital literacy and the Digital Skills Library. The Digital Skills Library, created by the EdTech Center at World Education, is an open repository of free learning resources designed to help all adult learners develop the digital skills needed to achieve their personal, civic, educational, and career goals. It caters to a range of digital skills and allows learners to take control of their learning. Northstar Digital Literacy, developed by Literacy Minnesota, also encourages this same mindset. The program is centred around computer skills and was developed in response to the needs of job seekers who may lack the digital literacy skills needed to seek, obtain, and retain employment, as well as to perform other tasks in daily life. It defines basic skills needed to perform tasks on computers and online. Online, self-guided modules assess the ability of individuals to perform tasks based on these skills, with a guided curriculum included for teachers including resources and lesson plans. These assessments are administered by a proctor, who is then able to give the learner Northstar certificates for their skills, which are internationally recognized by employees across the USA. In general, the program is designed for learners who possess an intermediate level of English language or above, given the language used in the tasks. However, ample visual prompts are provided, providing access to some learners with beginner levels of English who have prior experience with the digital skills involved. The program is also widely used by native English speaking adults who would like to improve their digital literacy skills.

04
Considerations and Recommendations:

The Fellow's research has illuminated valuable learnings surrounding the teaching and learning of digital literacy. The following recommendations are intended to serve as guidelines for Learn Local Organisations across Victoria.

Key recommendations for teachers in classroom practice:

- Accept the dynamic and ever-changing nature of technology. Use this to navigate change and adopt a flexible mindset.

- Use screen sharing tools to clearly model digital skills and transferability, drawing attention to differences in devices and operating systems.

- For beginner level EAL learners, use the keyboard as an entry point to into digital skills.

- To support the conceptualisation of learning, transform abstract digital ideas into material ones.

- Instil confidence in learners by using positive language and taking a strengths-based approach.

- Where there is capacity, provide digital mentoring in the learner's first language.

- Promote a flexible mindset by troubleshooting to the best of one's ability to solve the problem and modelling this approach to learners.

- Reflect at the end of the lesson to consolidate achievements and promote metacognition.

- Employ the think-aloud approach to model a digitally resilient approach.

- Respond to the needs of the learners, given the digital literacy tasks they face daily.

- Use learner-centred digital skills tools such as the Digital Skills Library and Northstar Digital Literacy.

Key recommendations for Learn Local Organisation leaders:

- Considering the instructional strategies that the Fellow encountered during her study tour, provide opportunity for professional development of digital resilience and digital literacy instructional practices to teachers. This could include readings from the DRAW project, or sessions where leaders discuss the concepts of digital literacy and digital resilience with teachers, as the Fellow has carried out at her own workplace.

- Provide multiple opportunities for learners and teachers to work with digital mentors, as highlighted by the DRAW project. These mentoring sessions should be based on positive communication and supportive language (Cox, 2023).

- Provide teachers with the opportunity to share their digital challenges and triumphs in a community of practice. The community of practice may have different focuses, such as the one the Fellow attended on Hyflex practice.

- Adopt organisation-wide tools such as Northstar, to assess the digital literacy of learners. to assess learners digital literacy, such as Northstar. Alternatively, develop a digital skills curriculum that guides digital literacy practice and is structured according to a learning progression of each platform, as per the Northstar curriculum.

Key recommendations for policymakers of the Victorian Skills Authority and Department of Education and Training:

- As per the use of Northstar in the USA, develop and promote the use of a state or nation-wide digital literacy learning and assessment tool that includes self-paced modules and provides learners with recognized certification upon completion of assessment. To support beginner level EAL learners, include modules on foundational digital skills, with simple English language and ample visual prompts.

- Given the gap in teacher education on digital literacy teaching strategies and methodologies, include this subject in EAL teacher training.

- In line with the resources and guides from the DRAW project, develop and promote digital literacy professional development materials for teachers that incorporate the idea of digital resilience.

05
Impacts of Fellowship:

Personally

Participation in the fellowship has had a profound personal impact on the Fellow, as she was able to explore a new and exciting field that she is passionate about. The opportunity to travel overseas allowed the Fellow to be exposed to a broader perspective of digital literacy and diverse international approaches to adult migrant and refugee education. The Fellow has gained confidence as a leader, emerging from the experience with a heightened sense of competence and expertise in guiding teachers and learners through the intricacies of digital literacy practice. The Fellow has also gained a deep understanding of the complexities of the migrant and refugee experience, including the role of digital literacy in the settlement experience.

Professionally

The Fellow has developed skills in the area of digital literacy best practice in the sector of adult migrant and refugee EAL education. Moreover, connecting with like-minded professionals in the field allowed the Fellow to build meaningful relationships and expand her network, opening doors to new insights and collaborative opportunities. Above all, the experience has been invaluable in understanding how the gap between research and practice can be bridged. During her time at World Education, the Fellow witnessed how theoretical knowledge translates into real-world applications. In collaboration with Monash University, Australian Catholic University and VicTESOL, the Fellow has been directly involved in

projects that aim to translate a deep understanding of the field and theory into meaningful practical skills.

As the Fellow has gained a deeper understanding of the important role that digital literacy plays in the refugee and migrant settlement experience, she has also grown to appreciate a strengths-based approach to learning. The role this plays in digital literacy practice is important, as it links to the development of digital resilience. The Fellow now endeavours to address each digital-related problem that arises through a digital resilience lens, with the aim of imparting this view with her learners and colleagues. The Fellow has also gained a profound insight into the significance of teaching life skills to adult learners, realizing that adult English language schools serve not only as language learning platforms but also as crucial institutions for equipping students with the essential tools needed to thrive and seamlessly integrate into society.

The Fellow also recognizes the importance of a growth and adaptive mindset in her professional approach. In particular, continuing to understand the needs of teachers and students is crucial to carrying out an effective digital literacy program. Whilst she discovered a range of tools, apps and platforms during her research, it has become clear that constantly introducing and mandating new organization-wide tools is not always conducive to effective digital literacy practice, due to the demand this places on teachers and learners. Of course, rapid advancements in technology mean

that learning about updates is necessary. Whilst a set of digital resources should sustainably be used organization-wide, teachers and learners should be given the opportunity to engage with new tools as they deem appropriate for their own practice or learning.

Organisationally

The Fellow has been very fortunate to work at an organisation where professional development is valued and leadership views the demands and challenges of digital literacy on the sector as an opportunity to grow and adapt to the needs of the learners. As a result, the Fellow has been guided and supported when leading the digital program at Carringbush Adult Education. Overall, the Fellow was able to explore best practice of digital literacy at Carringbush Adult Education in a number of capacities and pilot various new approaches and programs, described below. Digital literacy and learning has now become a focus of the organisation. In line with her recommendations to LLO leaders and policymakers, the Fellow has led a number of professional development sessions influenced by her fellowship, including the concept of digital resilience and how it can be integrated into everyday practice. The Fellow is very pleased to observe teachers showing awareness of their digital resilience and modelling it to their learners. Learners have also been demonstrating increased ability to troubleshoot and problem solve. This is supported by staff modelling digital resilience in their own use of technology and being explicit about the strategies involved in practising the approach. For example, during digital mentoring, the bi-cultural officer frequently has conversations with Vietnamese students in their native language that uses positive, strengths-based language and reminds the learners of their ability to be resilient in the face of digital challenges. As a result, many students have expressed increased enthusiasm and engagement in learning about digital skills.

Due to the Fellow's research, several initiatives have been piloted at Carringbush Adult Education. The organisation has introduced the position of Digital Capacity Coordinator, highlighting the importance of

digital literacy and learning in organisational growth and demonstrating a commitment to enhancing digital literacy initiatives. The title indicates the complexity and multi-dimensional nature of the role and responsibilities through overseeing the implementation and sustained application of a number of initiatives, including digital mentoring for both students and teachers, online and blended learning, digitised resources, device lending library and strategic thinking. Another prominent part of the role is delivering professional development to teachers, regarding new tools or upskilling and consolidation of ongoing tools. Several tools and platforms that were discovered during the research have been successfully piloted at the organisation and are now adopted into daily digital literacy practices, including screen casting apps such as Reflector 4 and the digital skills library. The push-in digital mentoring program has also demonstrated considerable success at Carringbush Adult Education. The research has enabled the fellow to fully understand the needs of the class during her visits and aim to provide teachers and learners with the best possible learning experience.

The Fellow is now in the process of creating and piloting a digital literacy curriculum for Carringbush Adult Education, with the aim of providing teachers with a clear, user-friendly guide detailing learning progression of the essential digital skills and platforms used at the organisation. Skills and knowledge of each platform will be provided, along with relevant resources created by both the Fellow and her colleagues. The aim is to provide teachers with the tools they need to independently and confidently navigate digital literacy instruction.

Northstar Digital Literacy assessment is also currently being piloted at Carringbush Adult Education. Whilst there are some resources that can be accessed by learners for free on the website, a full organisational subscription was purchased by Carringbush, which provides more resources and learning modules, as well as allowing it to become a testing location where proctored assessments can be administered and certified. As of December 2023, there are 2084 Northstar Digital Assessment testing locations in the USA. In Australia, Carringbush Adult Education is

currently the only site. It is intended that piloting the platform will result in greater insight into how it can be adapted to the broader VET sector.

Broader VET Sector impacts

Drawing from the insights gained through the fellowship, the Fellow hopes that her acquired knowledge will contribute to empowering VET educators to effectively impart digital skills to learners in a way that supports them to become confident, resilient users of technology in both a professional and personal context. The learnings from the fellowship provide clear strategies and tools for educators to implement in their practice. Should teachers, LLO leaders and policymakers

adopt the key considerations and recommendations previously detailed, the Fellow believes that teachers and learners will be more equipped to overcome the barriers they face in digital literacy practices. The Fellow believes that these strategies and tools would produce effective results if the educator were to implement them at an individual level, or leaders were to implement them at an organisational level.

The Fellow aims to continue to connect with like-minded professionals in the field and disseminate her knowledge in order to promote transformative initiatives in best practice of digital literacy skills for VET educators of vulnerable learners.

Figure 6.   Welcome lunch at World Education, Boston for the fellow and other visiting researchers.

06
Sector Engagement (Dissemination):

In 2022, the Fellow contributed to the piloting of the AMEP Digital Literacies Framework and Guide, created by a team at Monash University, in collaboration with Lynda Wise and Associates (LWA). This resource contains valuable guidance and on how to plan for and teach digital literacy. In March 2023, the Fellow presented a webinar for VicTESOL titled Strategies for Teaching Digital Literacy and Resilience in the Adult EAL Classroom. Currently, the Fellow is working with the Stakeholder Engaged Scholarship Unit at Australian Catholic University as a co-investigator for a community research project. Learnings from the fellowship will help the Fellow to contribute to the report for this project regarding digital literacy and online learning for beginner adult EAL learners. The Fellow is also excited to be a part of a team awarded the 2022 VicTESOL research grant. The project is titled Developing Speaking: In Class and Digitally Mediated Teaching and Learning of Oral Language. Finally, the Fellow is in negotiation with the editor of VALBEC Fine Print to submit an article for issue one of 2024.

In addition to these dissemination activities, the Fellow will be recommending to the Victorian Skills Authority that they incorporate the recommendations into policy within the Learn Local sector. She will continue to collaborate and share findings with researchers and other contacts in the sector.

Figure 7. Dinner with Jen Vanek, Director of Digital Learning and Research at World Education.
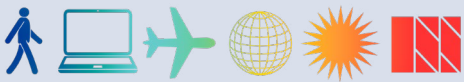
07
Conclusion

Digital literacy can be a multi-dimensional and challenging space. However, findings from the Fellow's research indicate that it is also a space that provides for immense affordances of learning with the opportunity for both teachers and learners to grow in a range of competencies. The Fellow aimed to explore strategies for teaching digital literacy that take into account the socio-emotional challenges involved when engaging with technology in the classroom. By viewing best practice of digital literacy through a socio-emotional lens, teachers can support learners to become more digitally resilient. Clear modelling and extensive scaffolding give learners the best possible opportunity to internalise digital skills, whilst adopting a strengths-based and learner centred approach are equally effective strategies. Moreover, celebrating success and encouraging a flexible mindset allows the learner to grow their confidence and trouble-shooting abilities. Through these strategies, teachers gain the ability to empower learners to become independent, proficient users of technology.

08
References

Australian Bureau of Statistics. (2021). Greater Melbourne. Retrieved September 27, 2023, from https://www.abs.gov.au/census/find-census-data/quickstats/2021/2GMEL

Adhyaru, J. (2019, August). SWOT analysis of digital literacy in EAL class for adults. VicTESOL Symposium 2019. Retrieved August 12, 2023, from https://victesol.vic.edu.au/wp-content/uploads/SWOT-analysis-of-digital-literacy-in-EAL-class-by-Jigar-Adhyaru-1-E5-1.pdf

Alam, K., & Imran, S. (2015). The digital divide and social inclusion among refugee migrants. Information Technology & People, 28(2), 344–365. https://doi.org/10.1108/ITP-04-2014-0083

Cox, D. (2023). Digital skills for education and training: A good practice guide. https://www.teachingonline.com.au/digital-skills-gpg

Department of Education, Skills and Employment. (2020, November 11). Supplementary Submission. In House of Representatives Standing Committee on Employment, Education and Training Inquiry. Canberra. Commonwealth of Australia. https://www.aph.gov.au/Parliamentary_Business/Committees/House/Employment_Education_and_Training/RemoteEducation/Report

JFF, & World Education. (2022a). A Holistic Understanding of Digital Skills: DRAW Detailed Findings and Discussion. Retrieved April 23, 2023, from https://publications.worlded.org/WEIInternet/inc/common/_download_pub.cfm?id=25335&lid=3

JFF, & World Education. (2022b). Digital Resilience in the American Workforce: Findings from a National Landscape Scan on Adult Digital Literacy Instruction. Retrieved April 23, 2023, from https://publications.worlded.org/WEIInternet/inc/common/_download_pub.cfm?id=25335&lid=3

JFF, & World Education. (2022c). Instructional Approaches and Practices: Digital Resilience in the American Workforce (DRAW): Detailed Findings and Discussion. Retrieved April 23, 2023, from https://publications.worlded.org/WEIInternet/inc/common/_download_pub.cfm?id=25309&lid=3

Johnson, R. (2018). Impacts and strategies for adult classroom success. MinneTESOL Journal, 34(2).

Kop, R., Fournier, H., & Mak, J. S. F. (2011). A pedagogy of abundance or a pedagogy to support human beings? Participant support on massive open online courses. The International Review of Research in Open and Distributed Learning, 12(7), 74–93.

Law, N., Woo, D., Torre, J. de la, & Wong, G. (2018). A global framework of reference on digital literacy skills for indicator 4.4.2 (UNESCO Institute for Statistics Information Paper; No. 51). https://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf

Literacy Minnesota. (n.d.). Northstar Digital Literacy. Retrieved October 7, 2023, from https://www.digitalliteracyassessment.org/

Palanac, A. (2022). Towards a trauma-informed ELT pedagogy for refugees. Language Issues, 33(1), 34–45.

Tour, K., Creely, E., & Waterhouse, P. (2022). Enhancing Digital Literacies with Adult English Language Learners: Theoretical and Practical Insights (1st ed.). Routledge.

Tour, K., Creely, E., Waterhouse, P., & Henderson, M. (2022). AMEP Digital Literacies Framework and Guide (Version 3). Monash University. https://doi.org/10.26180/20493207.v3

World Education. (n.d.). Digital Skills Library. Retrieved November 3, 2023, from https://digitalskillslibrary.org/