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An important, but neglected aspect of learning assistance in higher education: Exploring the digital learning capacity of academic language and learning practitioners

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Digital literacy has become increasingly significant in tertiary environments, as institutions move towards preparing students for 21st century workplaces and careers that emphasise digital literacy. As such, Academic Language and Learning (ALL) practitioners within these institutions are under pressure to possess familiarity and skills in the digital education space. Despite this need, there is a shortage of evidence that identifies the competencies or gaps in the current knowledge that ALL advisors have in Australian tertiary institutions; there is also a lack of awareness about how to address the gaps in knowledge for technology-enhanced learning and academic support. In light of this lacuna, in late 2018, the Association for Academic Learning and Language (AALL), the professional body for Academic Language and Learning practitioners, established a working group to investigate the knowledge and gaps in digital literacy in the ALL profession. The authors of this paper are all members of this working group and aim to explore the state of digital learning in their field. The long-term aim of the working party is to develop research-led resources and strategies to assist in the professionalisation and upskilling of ALL staff in technology-enhanced academic language development and support. This paper reports on the preliminary findings of a mixed-method participatory action research study of ALL practitioners' preferences, competencies and confidence in the digital learning space. It is hoped that this study will provide members within the AALL professional body, as well as tertiary educators generally, with strategies required to identify, develop and maintain effective digital literacies across the higher education sector.

Keywords

digital literacy, academic language, learning support, ALL practitioners, digital learning, higher education

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Introduction

Digital technology has brought rapid change to the working practices, teaching, learning and professional development of staff in tertiary education contexts (Adams Becker, Cummins, Davis, Freeman, Hall Giesinger & Ananthanarayanan 2017; Bertrand 2010; Laurillard 2012). Academic Language and Learning (ALL) practitioners within the sector are experiencing a shift in their practice with growing demand for supporting students in digital and online learning environments. However, little is known about the digital literacy of ALL professionals. Understanding the current digital capacity and capability of ALL educators will better assist institutions and professional bodies such as the Association for Academic Language and Learning (AALL) to equip ALL staff with the tools they need to succeed in the digital world.

A mixed method participatory action research project was established in 2018 by the AALL digital literacy working group (DLWG) to explore digital learning and digital literacy within our profession. This paper provides an overview of the ALL context, and a literature review on the concept of digital literacy and digital literacy capacity in ALL and general higher education (HE) settings. It reports the initial findings of the study which is still in progress at the time of writing.

The context: AALL and ALL educators

The Australian professional association for ALL practitioners was established to provide members with a forum to deliver professional development, networking, research, and other opportunities for ALL educators who:

> *play a valuable role in their higher and further education institutions by providing research-informed teaching both inside and outside curricula to assist students in developing appropriate academic language and learning expertise; by collaborating with other higher and further education staff in the development of curricula so that they provide better learning opportunities for students' language and learning development; and by contributing to the development of policy in relation to academic language and learning. (Association for Academic Language and Learning [AALL] 2010, p. 1*)

The role of ALL experts in the student experience at tertiary institutions in Australia has grown due to the increasingly diverse nature of the student population (Gale & Parker 2014; García 2018; Murray & Hicks 2014). ALL practitioners have recently been recognised as having a "dynamic" role in HE institutions performing a variety of roles such as one-on-one consultations with students and working with teaching and professional staff to create embedded content for university courses (Evans, Henderson & Ashton-Hay 2019). Consequently, ALL practitioners are expected to keep up to date with the changes to the student experience and adapt accordingly. Digital technology is arguably one of the most significant changes within recent decades to have influenced the student experience. It continues to be at the heart of an institution's core business and therefore cannot be underestimated (Beaumont 2011; Kregor, Breslin & Fountain 2012). It is evident that the nature of tertiary learning and teaching is moving towards models that depend heavily on digital literacy, such as online courses and blended delivery (Eshet-Alkalai & Chajut

2010; Mort & Drury 2012). Thus, digital learning and teaching is increasingly becoming the norm across institutions not only in Australia, but around the world (Daniel 2009).

ALL staff within HE institutions are under increasing pressure to be both knowledgeable and skilled in digital literacy. Despite this, we know little of the capacity or the potential gaps in relation to the digital literacy knowledge of ALL practitioners in Australian tertiary institutions. These factors, in concert with the need for continued professional development of AALL members, have led the Association to establish the DLWG. One of the functions of our group is to explore the capacity of the current AALL membership in the area of digital learning, and to contribute to the development of this capability in the future. Our long-term aim is to develop research-based and member-led resources and strategies that enhance academic language and learning support. Consequently, we aim not only to enhance the digital literacy expertise of the AALL community, but also continue to develop our understanding of how digital technology impacts the way we approach the student experience and how we collaborate with key stakeholders more broadly within education institutions.

Literature review

Research on digital literacy - sometimes referred to as digital competency, internet literacy, digital media literacy or media literacy (Kady & Vadeboncoeur 2017) - reveals the pervasiveness of technology in work and social settings and the reliance on being able to access and use technology effectively (Reynolds 2016). Definitions of digital literacy have evolved according to technological change and the context in which the definition is applied (Jisc, 2014). In a review of literature, Reynolds (2016) undergirds this conclusion, finding that many definitions of digital literacy are skills based and are linked to specific technologies. This echoes Aviram and Eshet-Alkalai (2006) call for definitions of digital literacy to be regularly reconceptualised owing to evolving technological environments.

Although there is no unanimous definition of digital literacy (Hallam, Thomas & Beach 2018), most authors cited herein agree that digital literacy encompasses those cognitive skills required when operating in a digital environment. We concur that being digitally literate refers to the "ability to read and write using online resources and includes the ability to select sources relevant to the task, synthesise in a coherent message and communicate the message with an audience" (Bulger, Mayer & Metzger 2014, p. 1567) and "perform tasks effectively in a digital environment" (Jones and Flannigan 2006, p. 5). Eshet-Alkalai (2004, p. 93) attempts to provide a broader description of digital literacy as the ability to use "a large variety of complex cognitive, motor, sociological and emotional skills" that are needed to perform in digital environments. However, as useful as such definitions are, the DLWG suggest that the rapid pace of change in the digital learning space—and the context-specific nature of digital literacy definitions—gives weight to AALL periodically reviewing these definitions.

It is essential to understand the skills and competencies relevant to academic language and learning support, and to uncover any professional and institutional barriers to ALL practitioners from being at the frontier of digital literacy. Although there is a need to define and identify the cognitive and technical skills required for ALL practitioners to demonstrate digital literacy, it is also useful to consider descriptions of digital literacy that encompasses more than a possession of universal skills. Gourlay, Hamilton and Lea (2013) argue for a more comprehensive understanding of situated digital literacy practices:

> *The aim is to access participants' perceptions and meanings in order to illuminate observed behaviour in relation to literacy practices. In its ecological approach, it focuses on the performance of literacy events and the roles of all participants, not just learners.* (p. 4)

Although research on the capacity of digital literacy among ALL practitioners in Australia is scarce, there are many studies about digital literacy in the wider HE context (Bhatt & Mackenzie 2019; Sappey & Relf 2010; Thota & Negreiros 2015). Sappey and Relf (2010), for example, highlight the great effort that is required of teachers in the higher education sector and conclude that external support from institutions is required for academics to maintain their work practices in a multi-modal context. International studies with a focus on the role of digital technologies in the learning development profession (Beetham 2014; Thanaraj & Williams 2014) also emphasise that HE institutions are now expected to prepare students for the digital world and that it is part of the role of learning practitioners to assist students with their digital literacy development and readiness (Beetham 2014). In addition there is a growing demand for "good guidance" (Smith 2019, p. 5) for technology-assisted academic language support as the manner in which we as ALL practitioners implement technology is fundamental to our professional identity. Following Gourlay et al.'s (2013, p. 4) call for ethnographic "observations of empirical examples rather than rhetorical claims", this paper aims to provide insight into current digital practices, challenges and strategies from the perspective of ALL practitioners working in Australian higher educational institutions.

Research design

A mixed method research design within a participatory action research framework was used to explore the current digital practices – capacity and capability – of ALL practitioners guided by the following research questions:

> 1) What are the current digital practices in the AALL community?
> 2) To what extent are the AALL members competent and confident in their digital technology use?
> 3) What support and training are available to AALL staff with regard to digital literacy development?
> 4) What role do professional, personal and institutional factors play in the digital literacy practices of AALL members?

Elements of participatory action research (PAR) such as "internal development and ownership of the research, rather than diagnosis and imposition from outside" (Walter 2009, p. 3) are necessary for this project. As members of the AALL DLWG, we, the authors, are both "the researched" and "the owners and instigators of the research" (Walter 2009, p. 2). By inhabiting dual roles, we are able to draw on our insider knowledge to enhance the study design and data analysis. As AALL community members, we are aware of our positioning, which is often part of qualitative studies, characterised by understanding the phenomenon of interest from an insider's perspective (Merriam 1998). Thus, the researchers in this project are both participants and "instruments for data collection and analysis" (Merriam 1998, p. 6). We believe that our perspectives as insiders and outsiders allow us to develop deep insights into the digital literacy and learning practices in the AALL community. In addition, applying a mixed method approach further strengthens the quality

of research as we obtain information that allows us not only to see the current trends in the data, but also to examine the reasons why these trends are evident in the AALL community.

Studies applying mixed methods in action research are frequently reported in the literature (Ivankova 2015). Both approaches share common features at a conceptual, philosophical, and procedural level (Ivankova & Wingo 2018). Combining these methods presents two main advantages: "addressing a practical issue in a systematic and dialectic way" and "enhancing translation of research into practice" (Ivankova & Wingo 2018, p. 986). The features of both explanatory and exploratory sequential mixed method designs, consisting of a succession of quantitative and qualitative phases, have been adapted to the present study's specific aims in line with Creswell's (2016) recognition of the need for more complex designs in particular investigations. Creswell (2015, p. 2) defines mixed methods as a research approach where "the investigator gathers both quantitative (closed-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems". The study involves several iterative cycles, each including the phases outlined in the flowchart below:

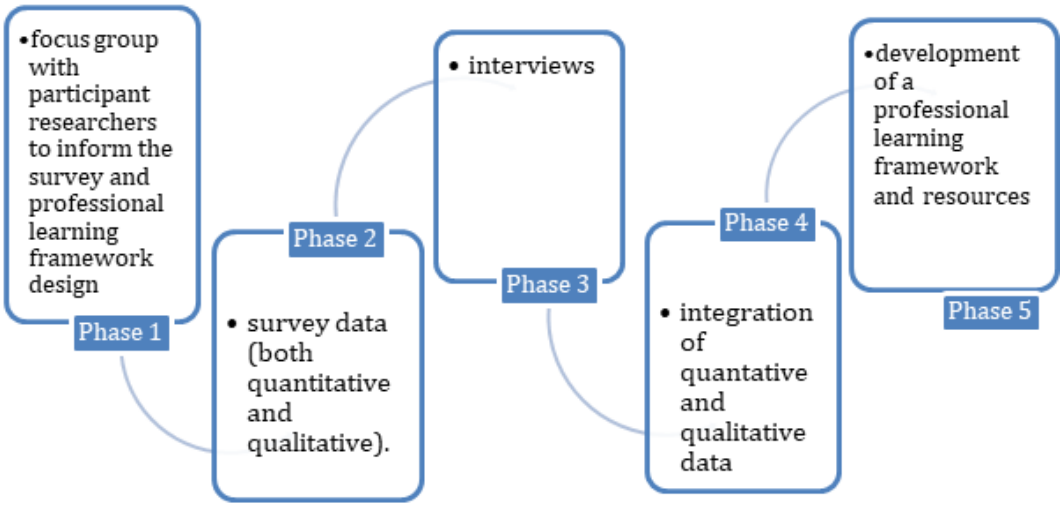

Figure 1. Phases and features of the study design

The first phase of the study involved the survey design which was informed by the DLWG members' experiences with digital technologies. The data collection instrument was developed using the data from focus-group discussions among the participant researchers over a period of eight months and was continuously improved through administration of pilot surveys and preliminary data analysed by the DLWG members. As a result, a survey was created with the use of Qualtrics, a survey research tool.

In the second phase of the study, quantitative and qualitative data were gathered via the survey to gain a broad overview of the current practices, tools used, help-seeking behaviours, and self-reported competence as well as training needs of AALL members. The survey respondents were recruited via a general callout for participants via the AALL email distribution list (N=200) and

the body's social media account. The survey was anonymous for those respondents who chose not to participate in the follow-up interview. The authors of this paper also responded to the survey as they are all ALL practitioners, and their responses contributed to the understanding of the phenomenon under investigation.

Both open- and close-ended items were included in the survey. A descriptive analysis of close-ended items included rating scales and measures of frequency, central tendency and variation with the use of the Qualtrics reporting and data analysis tools (cross tabulation and report filters). The analysis of open-ended survey sections involved combining and reducing the data, followed by several rounds of line-by-line coding (Flick 2002) in order to identify the main categories and themes. The open-ended responses proved to be a valuable source of qualitative data, especially in the area of AALL practitioners' own digital literacy development. The open-ended items included three questions: (1) "If you can, please list the technologies you would like training in, and what you'd like the training to focus on", (2) "How can AALL further develop your digital literacy and confidence?" and (3) a final item inviting participants to add "any other comments". This paper presents initial findings from these analyses of closed and open ended data.

In the third and fourth phases (yet to be completed), the combined approaches will develop an in-depth and detailed picture of current ALL practices as they augment and build upon the meaning of a single perspective as well as help the researchers to gain a well-rounded understanding of the current situation (Plano Clark 2010). This inductive research strategy (Merriam 1998; Williams 1996) will enable the contextualisation of data as well as facilitate a macro view of AALL practitioner's digital learning expertise, practices and learning needs, which, in turn, will inform the final stages of the project. At present, we are only able to present preliminary survey results (n=41) as data are still being collected.

Results

The analysis of the survey responses to date allowed us to gain an insight into the daily practices, self-reported competency and training needs of 41 respondents (including the nine DLWG members). This section presents the demographic characteristics of the survey cohort and a summary of the reported daily practices and digital learning capacities among the participants.

Respondents: who and where

The majority of the respondents (79%) work in capital cities, while some work in regional or remote areas (14% and 2% respectively). Two respondents are located overseas. The respondents come from various evenly distributed age groups (See Table 1 for more detail) and are mostly female (76%).

Table 1. Respondents' age groups

Under 24	25 – 34	25 – 44	45 – 54	55 or older	Prefer not to say
0%	20%	24%	32%	24%	0%

The respondents hold both academic and professional positions (49% and 46% respectively). The majority are employed on an ongoing basis (28 full-time and 6 part-time), with seven holding a full-time contract position. They support various student and staff cohorts in their institutions (see Table 2). The responses in the "Other" category included support of academic language advisors, vocational education and training (VET) students, teaching staff, and learning developers.

Table 2. Supported cohorts

Undergraduate students	Postgraduate coursework students	Research students	Teaching staff	Learning Developers	Other (Please specify)
30%	25%	18%	19%	6%	3%

These ALL experts' experiences of everyday digital tool use are described below.

Daily practices: what and how

When asked about their daily digital practices, 80% of participants reported relying on technology more than half of the time in their day-to-day work (see Figure 2), with almost a quarter of respondents reporting they use digital technology all the time and only one participant stating that none of their work relies on digital technology.

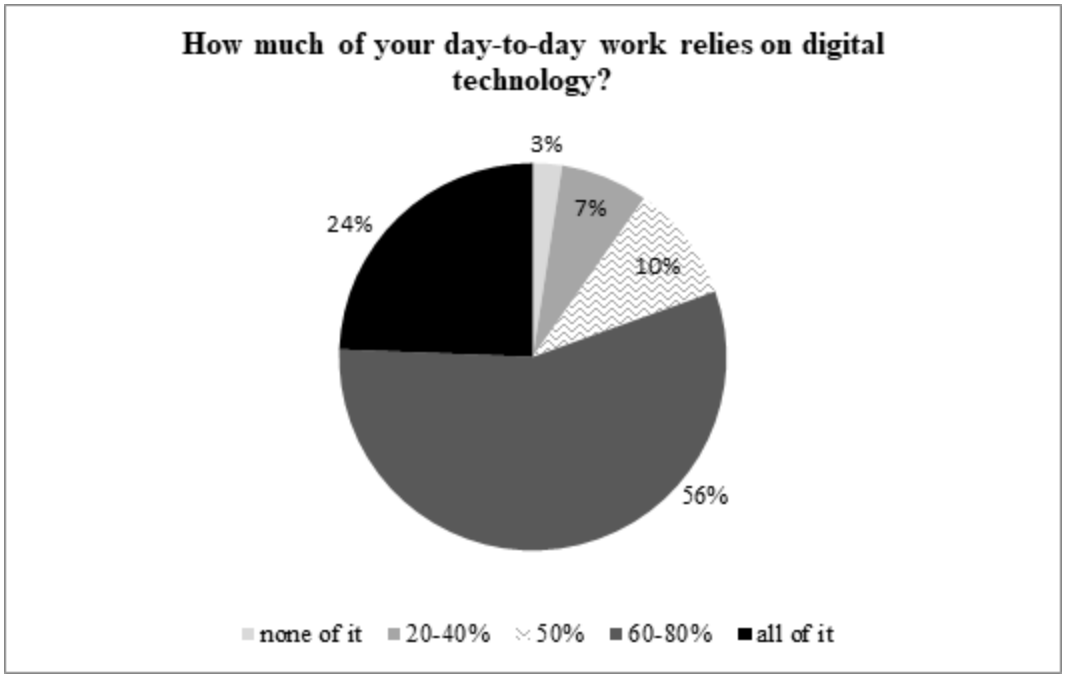

Figure 2. Reliance on digital technologies in daily practices

When the respondents do use technology, they employ it for different purposes (see Figure 3).

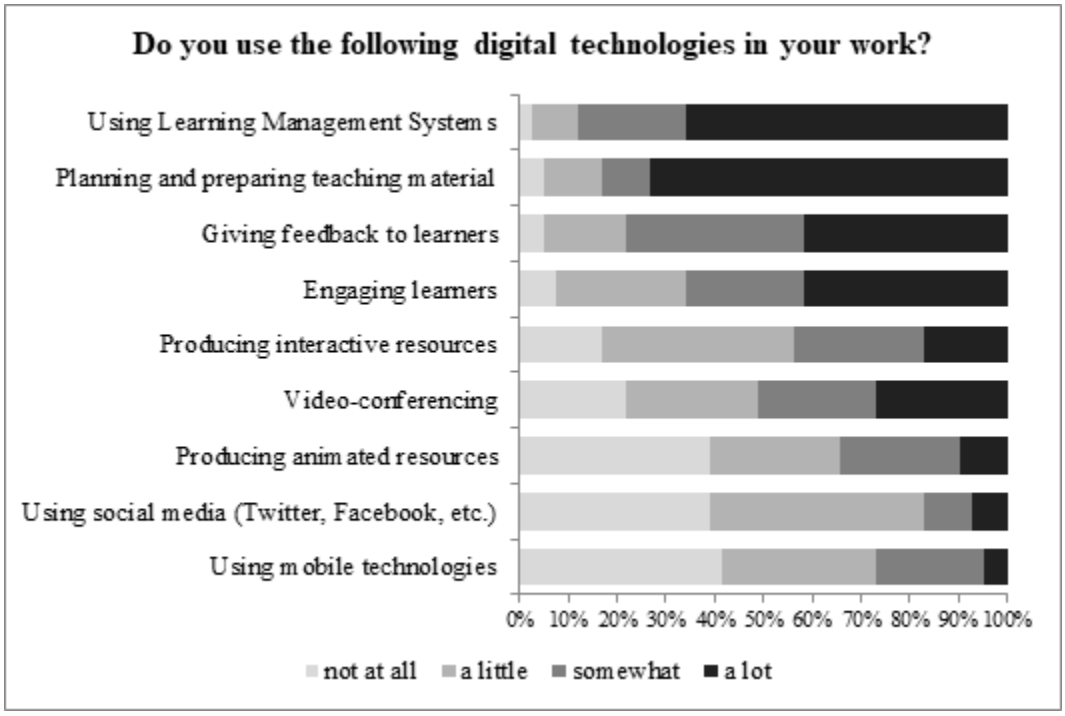

Figure 3. Use of digital technologies in ALL work

As demonstrated in Figure 3, the most common utilisation of technology is using a Learning Management System (88%), followed by planning and preparation for classes and consultations (83%), as well as using technology to give feedback (78%) and engage learners (65%). The least used are mobile technologies with 41% of respondents reporting not using them at all, preceded by 39% who do not seem to use social media or create animated resources.

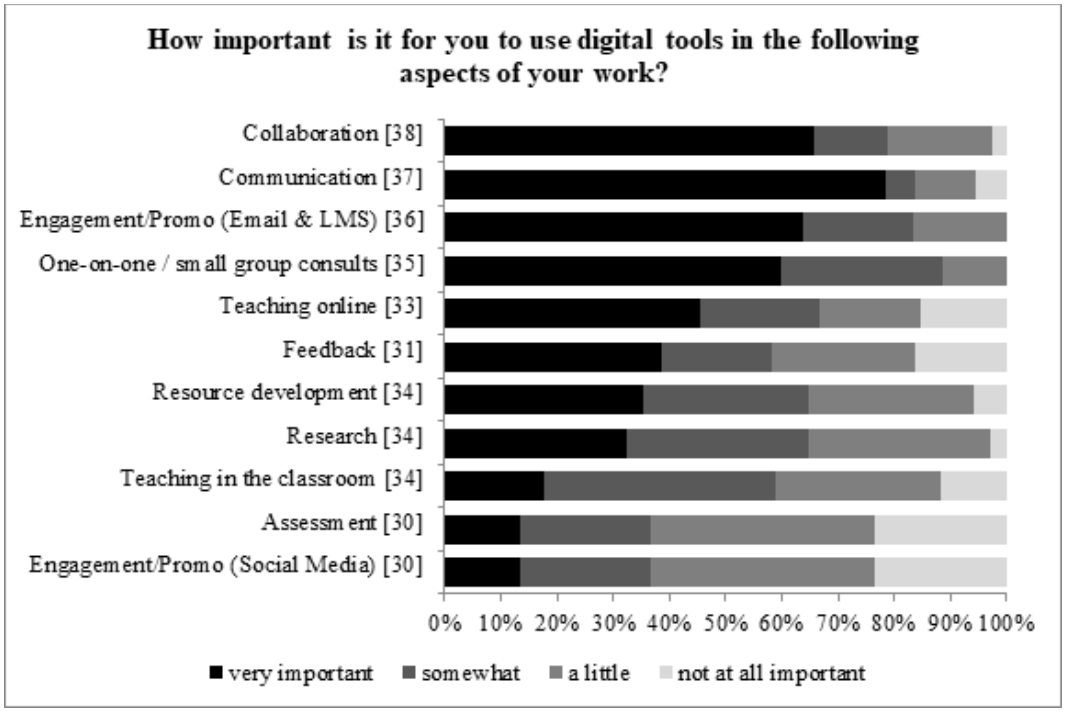

Figure 4. Importance of digital technologies in daily ALL practices[1]

When asked how important it was for them to use relevant digital tools in different aspects of their work (see Figure 4), most participants stressed the importance of using digital tools for collaboration and communication, followed by engagement and promotion via email or Learning Management System (LMS), as well as one-on-one or small group work. As can be seen in the chart, the tools that were used less and were considered to be the least important by ALL practitioners were those used for assessment and engagement on social media.

Competency: strengths and weaknesses

The respondents were asked to rate their level of digital competency on a scale 1 to 10, where "1" represented "not competent" and "10" represented "very competent". The overall level of competency among 41 respondents is quite high at 7.17 (see Figure 5 for more detail). However, only 22% of respondents displayed very high levels of competency (9 and 10 on the competency scale).

[1] The number in square brackets indicates the number of respondents per item (listed in descending order).

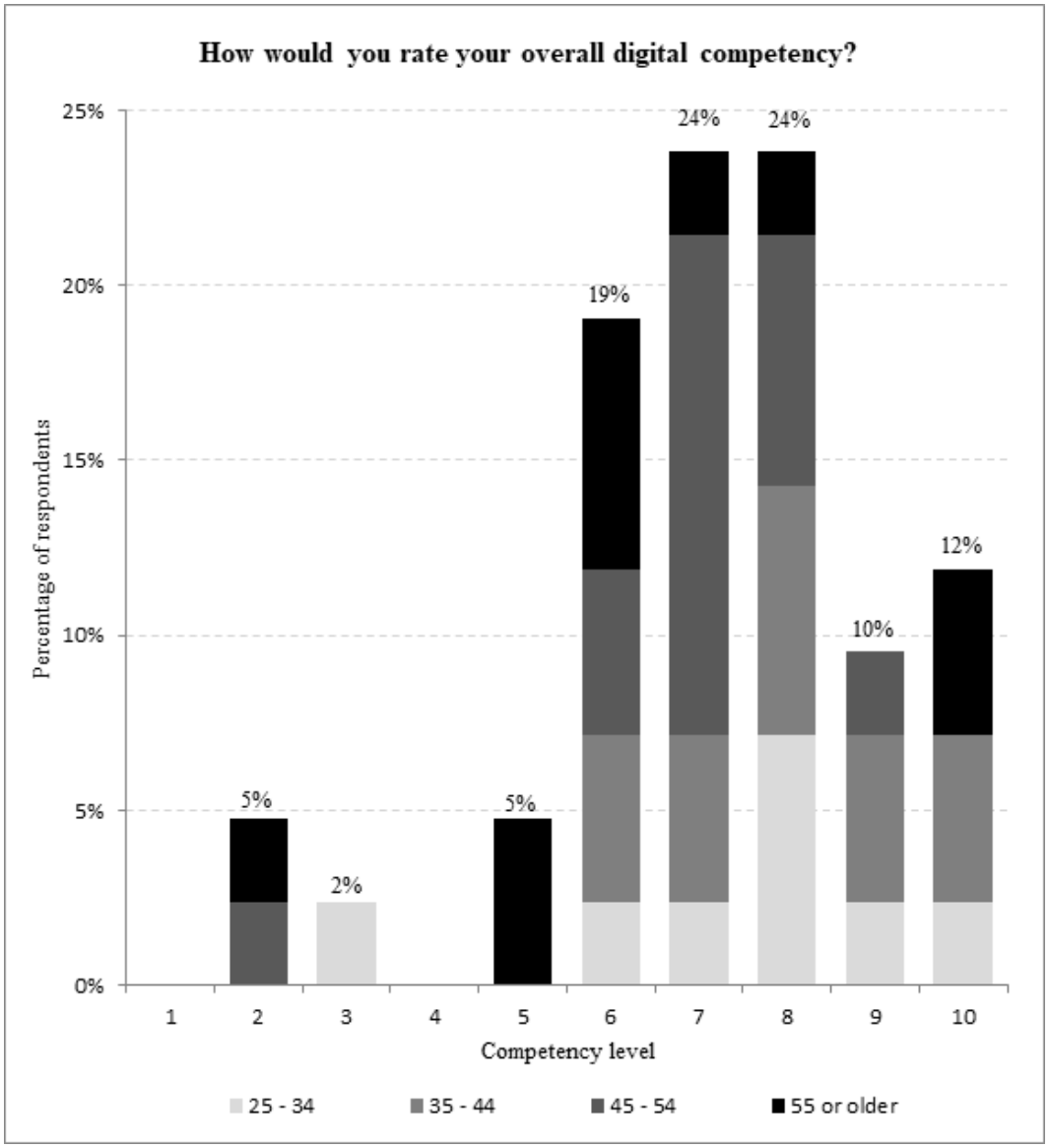

Figure 5. Self-reported digital competency (1 - not confident, 10 - very confident) with the age breakdown

Table 3. Self-reported digital competency (1 - not confident, 10 - very confident) with the age breakdown

Age group	Min	Max	Mean competency	Standard deviation	Number of responses
25-34	3.00	10.00	7.38	2.00	8
35-44	6.00	10.00	8.10	1.37	10
45-54	2.00	9.00	6.85	1.61	13
55 or older	2.00	10.00	6.50	2.29	10

Further analysis with the use of cross tabulation tools in Qualtrics demonstrates that the four age groups in this study were represented in various competency levels (see Figure 5 and Table 3). For instance, the respondents from the "55 or older" cohort have reported competency levels 2, 5, 6, 7, 8 and 10, with a mean of 6.5. The highest mean competency was found in the 35-44 age group (8.1), followed by 7.38 for the respondents aged 25-34 and 6.85 for those aged 45-54.

Figure 6 illustrates that more than 60% of respondents are confident (a self-rating of 7 or higher) about using digital tools for communication, engagement via email and LMS, one-on-one or small group consultations and collaboration. The respondents appeared more divided in their answers in other items, with many displaying lower levels of confidence in using technologies for other purposes. For instance, although almost all respondents use digital tools for research, teaching in the classroom and resource development, more than half of them chose 6 or lower on the confidence scale. The respondents demonstrated the most contrasting confidence levels in using social media: 26% are quite confident, whereas approximately 25% are not confident at all when using social media as a tool for engagement and promotion. Assessment is the last item in the chart, with only 16% of participants selecting confidence levels 9 and 10 (6 and 1 respondents respectively) and 14% choosing 1 and 2 on the confidence scale (3 and 3 respectively). As can be seen from the chart, assessment and engagement via social media are described as "not applicable" to their work by 14% and 12% of respondents respectively, followed by teaching online (10%) and feedback (10%).

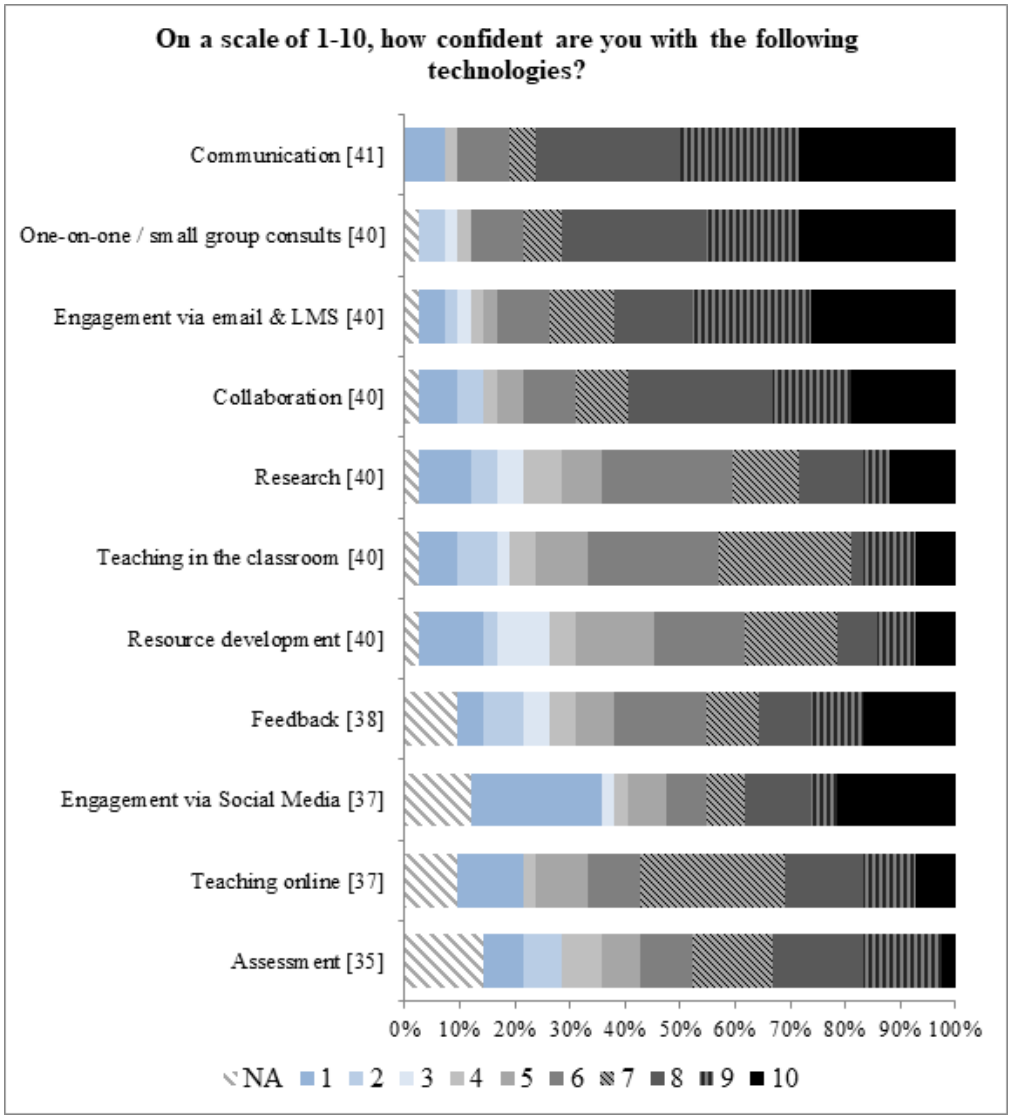

Figure 6. Confidence with specific digital technologies (NA -not applicable, 1 - not confident, 10 - very confident)[2]

The next section reports the data related to the respondents' approaches to developing personal and professional digital capacity.

Gaps and training needs: what and how

The survey results show that a vast majority of respondents are self-taught with regards to the use of digital technologies for specific purposes (see Figure 7). The second most common way to

[2] The number in square brackets indicates the number of respondents per item (listed in descending order).

acquire skills in specific technologies is through learning informally from colleagues, with training from employers not featuring at all in seven of 11 technologies included in the chart.

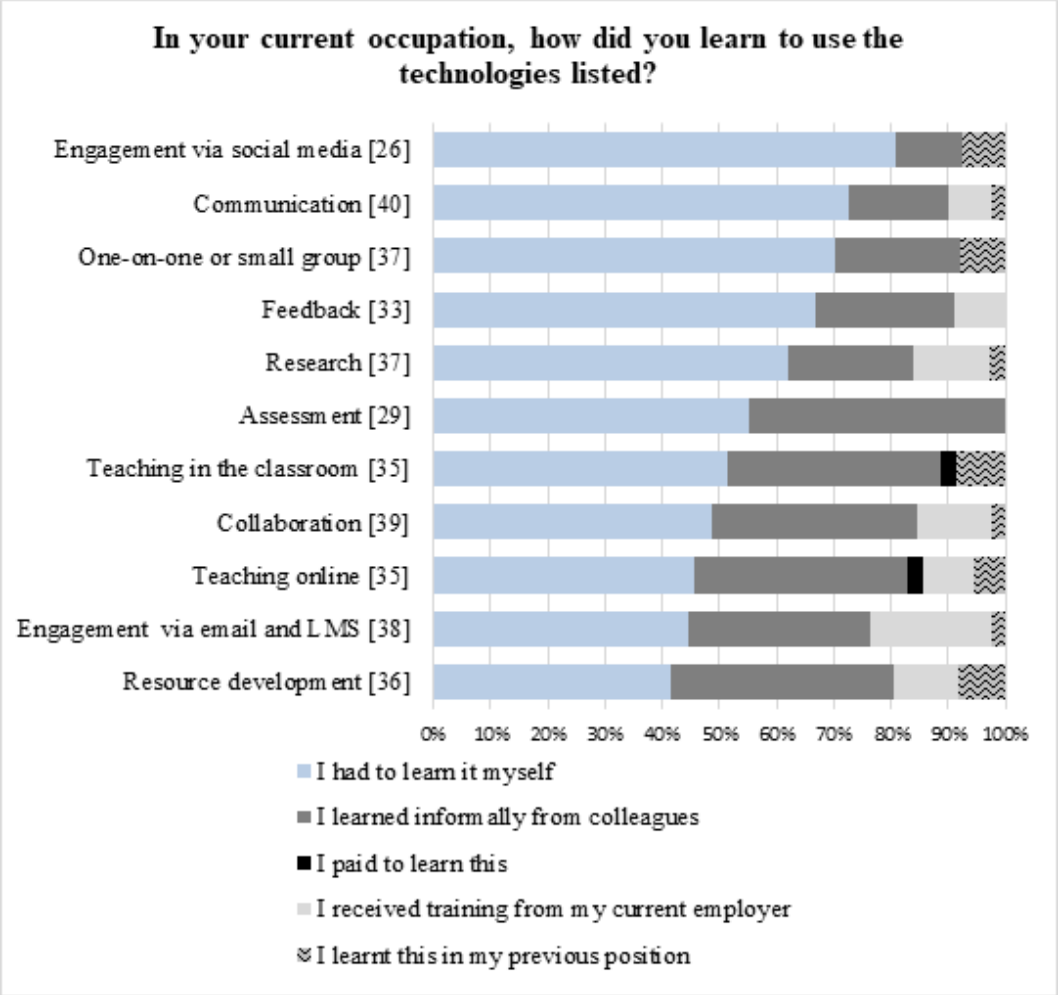

Figure 7. Learning about digital technologies[3]

As can be seen in Figure 7, although many respondents (n=37) use digital tools for one-on-one or small group ALL work, they received no training from their current employer. The same pattern persists with those who use assessment and social media technologies, although their numbers are smaller (29 and 26 respectively).

With regards to approaches to developing personal and professional digital capacity in their current work, 84% of respondents say that, when they need help, they search online, followed by 78% asking colleagues, and 68% resorting to the university LMS support (see Figure 8). Other avenues of learning included conferences and support services of a software or digital tool

[3] The number in square brackets indicates the number of respondents per item.

provider. Some respondents highlight that often it is a combination of approaches to developing capacity.

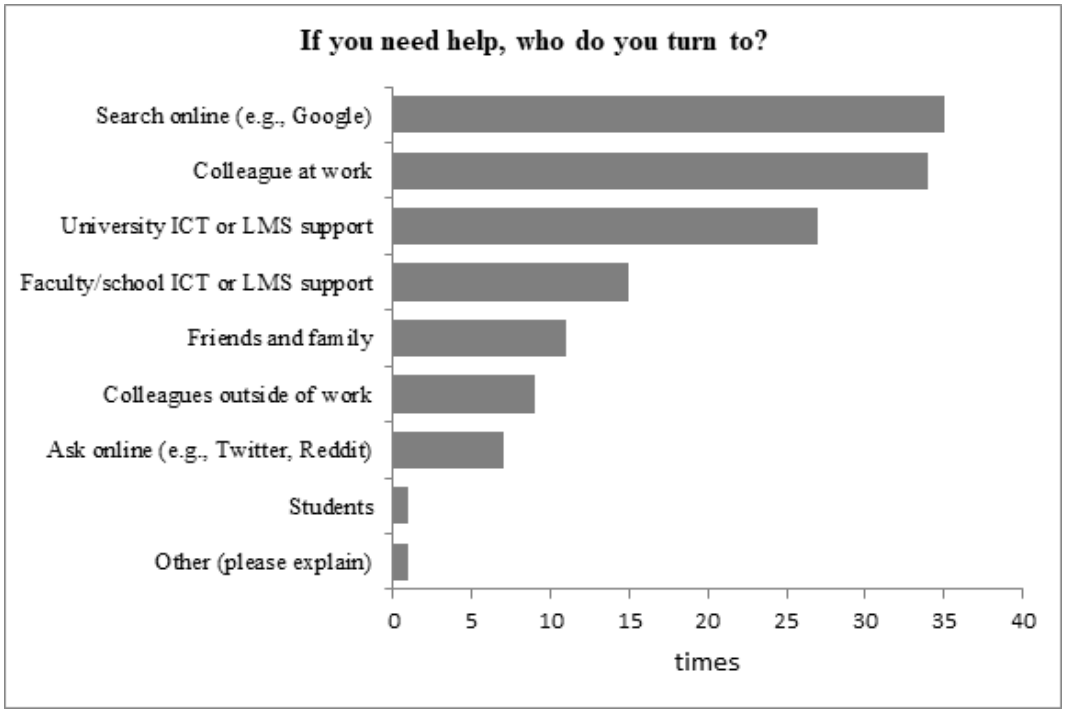

Figure 8. Digital help-seeking and learning approaches

Figure 9 below shows that approximately 50% of the respondents do not seem to receive adequate training and/or on-going support around the use of digital tools from their institutions. For five respondents (12%), the support was clearly inadequate. Only 17 respondents (40%) rate their training and/or ongoing support as relatively adequate (ratings 7 to 9).

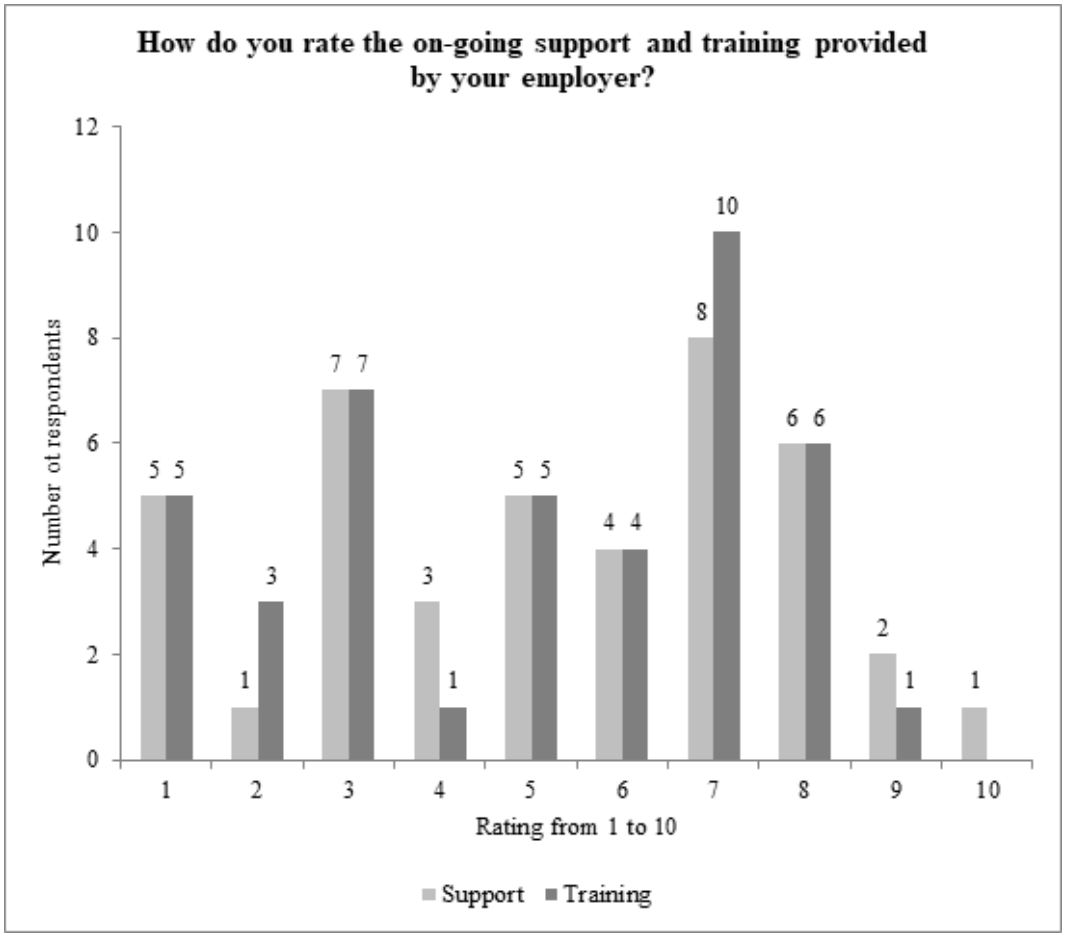

Figure 9. Institutional on-going support and training ratings (1-not adequate, 10 - more than adequate)

Figure 10 combines the data on the current use of digital technologies and digital learning needs which the respondents would like to address. As can be seen in the figure, the current use and digital learning needs appear to be linked in different ways. Among the most desirable learning interests are production of interactive resources (81%), engaging learners (76%) and producing animated resources (64%). The results indicate that, although not many respondents use digital technology to produce interactive and animated resources (44% and 34% respectively), many of the respondents would like to know more about these aspects (81% and 64% respectively). In contrast, technologies such as LMS and those used for teaching material preparation, have only 31% and 55% of respondents who would like to keep learning about their use, despite the fact that they are used most by the ALL practitioners in this study.

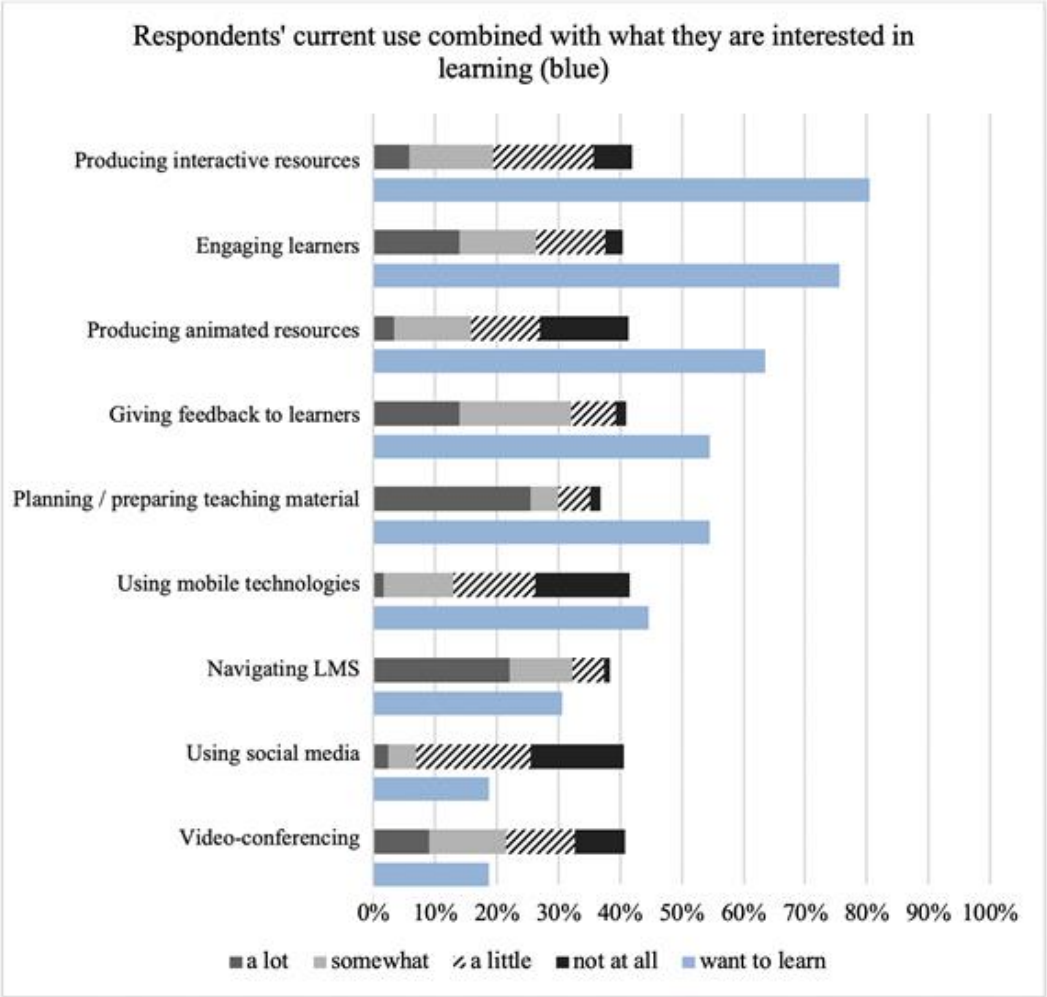

Figure 10. Digital learning needs and interests combined with current use data

The survey results also show that attending an online workshop was the most preferred form of training (76%), while other forms are also quite popular with 66% of respondents opting for face-to-face workshops, 58% requesting one-on-one conversations with an expert user and 53% willing to use online resources independently.

Participants' responses to open-ended survey questions provided additional insights into the role of digital technologies in ALL work and professional learning needs of ALL practitioners. The analysis of the open-ended responses to survey items 17, 18 and 24 indicates that many participants want a comprehensive approach to digital literacy development that is grounded in ALL practice and digital pedagogy. The analysis shows a particular need to understand the usefulness and affordances of digital technologies in the context of ALL work. For example, in the extract below, the respondent expresses their need to understand how to select and apply types of digital technologies rather than learn about one in particular:

> *Maybe not a specific technology but how to find out about what are the best technologies to use at a particular point in time, and how to learn how to use them for the purposes of my role* (Respondent 21).

Another respondent extends this idea, but with the focus remaining on the application of the technology:

> *There should be a component of the support focused on how to best use, design and apply technologies [...]. That's the gap between understanding the learning pedagogy and technical tool - how to best apply that pedagogy using said tool* (Respondent 40).

The analysis further indicates that additional training needs are sometimes dictated by institutional agenda, or, in the respondents' words, "whatever we are currently about to implement in our uni"(Respondent 18).

ALL practitioners in this study prefer to develop their digital literacy by learning from peers who have had direct experience:

> *[...] while I am confident with what I already know and in learning things on my own, there is always something new to learn by hearing and seeing how someone else is using digital technologies in this field - especially in HOW they are using these technologies* (Respondent 19).

During the analysis of the open-ended data, we noted a common need to understand best practice in digital learning. Respondents expressed a strong need for evidence to show how digital technology supports student learning. As Respondent 29 stated:

> *[I]t is important not to lose sight of the central role of the teacher/student relationship in effective LLA work. In my experience, students in most need of academic support may not have the independent learning skills needed to access online support materials.*

Students are the centre of ALL work, so it was not surprising that respondents wanted the association to provide opportunities to explore the effect of technology on student learning:

> *Review and research the actual pedagogic effectiveness and efficiency of digital technologies. What are the proven learning benefits to students [...]? What is the existing evidence, and what more needs to be done?* (Respondent 8).

To summarise, the survey results indicate that the ALL practitioners who participated in the survey are confident and extensive users of digital technology to communicate, collaborate and engage with students and peers. The results also indicate that ALL practitioners are capable and independent learners and adopters of technology. However, their self-reported competency and confidence do not always determine what technologies they choose to use. The results also reflect that institutional training and support are often seen as inadequate by the survey respondents. While ALL staff in this study employ specific tools and technologies on a daily basis, they often want to learn more about those and are prepared to do so in various face-to-face and online formats. In addition, the initial analysis of qualitative data points to the respondents' need for pedagogical rationales and the proven impact of digital technology on student learning.

Discussion

The aim of this project is to explore the digital capacity and capability of ALL practitioners. When we looked at the data about daily digital practices of the respondents (Research Question 1), we found that the ALL practitioners in this study used digital technologies regularly and attached various levels of importance based on the purpose of use in ALL work. Furthermore, the respondents acknowledged the need to go beyond specific tools and focus on pedagogical rationales and learning impact evaluations of technologies. These findings can be linked to the argument that such an "evaluative personal stance towards technology [...] elevates digital capability from a rapidly obsolescent set of technical skills to a lifelong knowledge practice" (Littlejohn, Beetham & McGill 2012, p. 552). This positioning is also reflective of a call to develop different approaches to digital capability, where situated practices and multiple ways of doing are accepted (Gourlay et al 2014; Littlejohn et al 2012). The respondents seem to favour using and learning about new technologies that involve engaging learners. This does not come as a surprise, as engaging learners is critical to the work of ALL practitioners. This is also reflected more broadly by Beetham (2014) who suggests that learning development practice fundamentally concerns our relationship with students.

In answer to Research Question 2, "To what extent are the AALL members competent and confident in digital technology use?", it was found that the digital capability of the AALL members who responded is high, but this is not necessarily related to digital competency or quality of technical skills to perform tasks of an ALL practitioner. Our small sample of AALL members also reveals that age groups were distributed along the competency scale and did not appear to influence confidence in using digital technologies at work. This finding reflects the literature where it is argued that education level and experience were more reliable indicators of measuring the confidence or abilities of using digital technology than age (Eshet-Alkalai & Chajut 2010; Farrell 2013; Helsper & Eynon 2010). We hope that the next phases of this action research project shed more light on the role of demographic and other personal factors in ALL educators' digital technology use.

In answering Research Question 3 related to training and support, we found that ALL staff are utilising the resources at their disposal from their institutions and beyond. Respondents in this study reported that they often engage in self-directed ongoing learning and decision-making with regard to digital technology, which, according to the literature, can actually enhance their ability to apply technology in their work (Littlejohn & Hunter 2016; Phillips 2015). The majority of respondents indicate that when they need help with technology they find it themselves, through a Google search or informally through their colleagues. These independent and peer-learning preferences may be partially explained by the inadequacy of institutional ongoing support and training for ALL staff. This finding is also related to Research Question 4 about the role of professional, personal and institutional factors in AALL members' digital literacy practices.

The findings above present an opportunity for ALL practitioners to further explore the role and significance of digital literacy within the profession. The literature suggests that institutional support for such approaches is essential for their consistency and sustainability (Bawa 2016; Phillips 2015; Sappey and Relf 2010). The eagerness of the ALL profession to learn more about technology-enhanced learning opens up the potential for institutions and associations like AALL to hold evidence led positions which inform the professional development they provide to members.

By initiating a culture of good practice around digital technology as a professional body, we hope to see a positive change in the quality of services provided to students, which may in turn improve students' overall digital literacy development. The participants in this study demonstrate a willingness to engage in peer learning and become part of communities of practice to continue developing their digital literacy capacity by familiarising themselves with successful pedagogical approaches in the use of digital technologies in ALL daily practices. There is no doubt that digital technologies play a vital role in the work of ALL practitioners; therefore, consistent and continued digital literacy development is needed. Finally, the preliminary findings of this study suggest that, although the ALL staff/ we are quite pragmatic in their/our use of digital tools and technologies (see also Beetham, 2014), their needs go beyond the practical and technical skills and knowledge of digital technologies. This initial analysis points to an emerging need to understand digital pedagogy and the evidence behind the technology application. These tentative, but promising, findings will be examined further to inform the next stages of this research project, including the development of an AALL digital literacy framework.

Conclusion

The initial findings of this mixed method participatory action research project provide an important insight into the current digital literacy capacity and capability of ALL practitioners and their lived experiences in technology-enhanced language and learning support. The results demonstrate that ALL practitioners in this study are both engaged and eager to extend their knowledge in the digital literacy field of practice. It is hoped that out of this research, AALL can establish a community of practice that will share and develop best practice in the digital literacy field in recognition of its importance to our workloads and professional identity in the 21st century.

The wider benefits of this project entail not only enhancing the digital literacy development of ALL practitioners, but also acknowledging the important role that technology-enhanced academic language and learning support plays in the Australian higher education context, particularly in regard to our unique relationship with students and their success. The reported findings should also be of interest to all ALL practitioners and other stakeholders in HE, especially to staff interested in expanding their institution's blended and fully online program offerings. We look forward to learning more in further phases and cycles of this project which will inform research to develop authentic solutions for enhancing the quality of technology-assisted ALL at higher education institutions.

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