

16 August 2024

## **Australian Digital Inclusion Alliance submission in response to the National Skills Taxonomy Discussion Paper**

### *About the ADIA*

The Australian Digital Inclusion Alliance (ADIA) is a shared initiative with over 500 business, government, academic and community organisations working together to accelerate action on digital inclusion. Our member organisations conduct a variety of research and practical programs aimed at reducing the digital divide and enabling greater social and economic participation for all Australians. The ADIA is supported by Infocchange, Google, Telstra and TasNetworks. Australia Post was also a founding partner.

### *The challenge of Digital Inclusion*

Digital inclusion is a multifaceted challenge impacting a vast number of Australians. According to the latest Australian Digital Inclusion Index (ADII) data released in 2023, 9.4% of the national population remains highly digitally excluded, and an additional 14.2% are digitally excluded. Taken together, almost one quarter of Australians remain digitally excluded (23.6%).<sup>1</sup> The most digitally excluded Australians are most likely to be First Nations Australians, those who have a disability, live in public housing, have not completed secondary school or are over 75 years of age.<sup>2</sup>

Digital inclusion is described across three pillars:

- Affordability - Affordable access to quality internet and an appropriate device(s).
- Accessibility - Access to inclusively designed online content, that's readable and accessible, including if a person is differently abled or from a culturally or linguistically diverse background.
- Digital ability - The knowledge, skills and confidence to complete tasks safely and securely online and further one's own knowledge and skills.

The latter pillar is the focus of this submission.

### *The JSA Discussion Paper*

The ADIA welcomes the opportunity to provide input on the development of a National Skills Taxonomy (NST). In particular, we note the importance of enabling cross-sector communication on digital capability as a core skill set required to fully participate in work, learning and life in contemporary society.

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<sup>1</sup> Thomas, J., McCosker, A., Parkinson, S., Hegarty, K., Featherstone, D., Kennedy, J., Holcombe-James, I., Ormond-Parker, L., & Ganley, L. (2023). *Measuring Australia's Digital Divide: Australian Digital Inclusion Index: 2023*. Melbourne: ARC Centre of Excellence for Automated Decision-Making and Society, RMIT University, Swinburne University of Technology, and Telstra.

<sup>2</sup> *Ibid.*

We commend the JSC's recognition that:

*[...] education institutions, private firms, professional associations, unions and governments maintain their own frameworks and terminology for skills. Some frameworks have specific and granular definitions of skills, whereas others use broad terminology. It is the equivalent of each actor speaking a different language.*

*This fragmentation creates significant translation barriers leading to siloed approaches and inefficiencies in addressing skills mismatches and gaps. This can appear as:*

- *Skills shortages in critical occupations and roles.*
- *Slow adoption of new or emerging technology and practices.*
- *Employers unable to identify which individuals have the right skills.*
- *Individuals lacking the right mix of skills for available jobs.*
- *Disjointed career and educational pathways for individuals.*
- *Underinvestment by businesses and individuals in professional development and lifelong learning.*
- *Individuals not adequately prepared for transitions into further education or employment.<sup>3</sup>*

The ADIA sees significant opportunities in creating a common language around digital capability across the community, private, education and training sectors, as there is no one organisation that is going to be able to respond to the skilling needs of all groups. For example, inDigiMOB does excellent work with First Nations Australians, the Alannah and Madeline Foundation works with younger Australians, BeConnected works with older Australians and of course the VET system offers training into all parts of Australia, including regional Australia.

Without a common way of describing digital capability, we are at risk of having all of these organisations and training providers pulling in different directions, leading to variations in training delivery and outcomes, and difficulty in adequately measuring the digital capability levels of Australians. Consequently, we can't easily identify skilling gaps, and are not making the material improvements necessary to meet the increasing demand for digital skills across the economy.

We need to create an environment where an individual can say: 'My digital capability is at a level 3 but I want this job that's advertised as a level 5, I'm going to find a training course that is designed to take me from a 3 to a 5'; where individuals, employers, training providers, and community organisations with skilling offerings, are all 'talking the same language.' Rather than the current confusion and inability to quickly identify and communicate where a person's skill level is and where it could be, we would have an environment where friction in communicating needs and offerings is reduced. Where people can focus on the capability uplift rather than trying to figure out or explain

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<sup>3</sup> Commonwealth of Australia (2024), National Skills Taxonomy Discussion Paper To inform the design of a National Skills Taxonomy, p. 6, [https://www.jobsandskills.gov.au/sites/default/files/2024-06/national\\_skills\\_taxonomy\\_discussion\\_paper.pdf](https://www.jobsandskills.gov.au/sites/default/files/2024-06/national_skills_taxonomy_discussion_paper.pdf)

where they're at, and where they need to get to. Or from an employer's perspective, where they can succinctly and clearly articulate the digital capabilities a role needs.

We agree that “disparate and disconnected ways of understanding skills is a problem in the face of a changing jobs and skills landscape”.<sup>4</sup> To that end, we welcomed<sup>5</sup> the Australian Government's recognition of the Australian Digital Capability Framework's (ADCF)<sup>6</sup> potential to be Australia's national common language on digital capability in the *White Paper on Jobs and Opportunities*.<sup>7</sup> However, to be a valuable and practical tool across the economy and society, there are a number of significant updates required of the ADCF, detailed below.

#### *The Australian Core Skills Framework, and the ADCF*

The ADIA acknowledges that the Australian Core Skills Framework (ACSF) is one of the “key skills taxonomies”.<sup>8</sup>

At present, digital capability is only dealt with in the ACSF through the addition of the Digital Literacy Skills Framework, which defines digital literacy as follows:

Digital literacy covers the physical operations of digital devices and the software operations in those devices. It incorporates the ability to search and navigate, create, communicate and collaborate, think critically, analyse information, and address safety and wellbeing using a variety of digital technologies. These skills are essential for individuals to participate effectively in today's society. Digital literacy skills exist on a continuum with varying degrees of competency required depending on the context (personal and community; workplace and employment; education and training) within which the skills are applied.<sup>9</sup>

Importantly, the Digital Literacy Skills Framework includes the necessary pre-levels to support those at the most foundational levels of digital skills:

- *Pre Level 1A*
  - *Begins to recognise there are different digital devices commonly used to connect with others*
  - *Begins to recognise some benefits of digitally connecting with others*

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<sup>4</sup> *Ibid*, p. 7.

<sup>5</sup> Australian Digital Inclusion Alliance (2023), Media release: 'Championing digital capability for all Australians', issued 11 October 2023, <https://www.digitalinclusion.org.au/adia-welcomes-the-recognition-of-a-digital-capability-common-language-in-the-governments-employment-white-paper>

<sup>6</sup> Commonwealth of Australia (2022), Australian Digital Capability Framework, <https://www.dewr.gov.au/skills-and-training/resources/australian-digital-capability-framework>

<sup>7</sup> Commonwealth of Australia (2023), *Working Future: The Australian Government's White Paper on Jobs and Opportunities*, <https://treasury.gov.au/sites/default/files/2023-09/p2023-447996-working-future.pdf>

<sup>8</sup> Commonwealth of Australia (2024), National Skills Taxonomy Discussion Paper To inform the design of a National Skills Taxonomy, p. 7, [https://www.jobsandskills.gov.au/sites/default/files/2024-06/national\\_skills\\_taxonomy\\_discussion\\_paper.pdf](https://www.jobsandskills.gov.au/sites/default/files/2024-06/national_skills_taxonomy_discussion_paper.pdf)

<sup>9</sup> Commonwealth of Australia, (2020), Foundation Skills for Your Future Program: DRAFT Digital Literacy Skills Framework APRIL 2020

- *Begins to recognise extremely familiar digital devices*
  - *Begins to recognise extremely familiar digital symbols*
  - *Enters extremely familiar passcode on a mobile phone*
  - *Locates symbols on phone, e.g. battery, volume + up, - down*
  - *Recognises the arrival of a new message*
- *Pre Level 1B*
    - *Begins to understand the purpose of some commonly used digital devices and software applications*
    - *Understands a limited range of benefits and drawbacks of being digitally connected to others*
    - *Begins to understand there are risks associated with providing information*
    - *Demonstrates an extremely limited capacity to maintain digital devices*
    - *Begins to navigate extremely simple digital screen*
    - *Uses an extremely limited number of digital devices and software applications*
    - *Recognises and responds to a limited number of digital prompts or alerts, texts and symbols*
    - *Begins to understand that content can be changed.*
    - *Ensures that phone locks*
    - *Recognises when device battery is low*
    - *Replies to a short SMS using one word or emoji*
    - *Uses computer mouse with increasing accuracy and double clicks*

### *The ADCF*

The Australian Digital Capability Framework Version 1.0<sup>10</sup> (ADCF) describes the broad digital capabilities required by workers across a wide range of Australian occupations and industries. The ADCF is an occupational and industry sector neutral tool for use by employers, Australian workers, students and job seekers, training product developers, VET professionals, policymakers and more.

The Framework was developed through:

- A review of existing digital capability frameworks in relation to the Australian workplace context and alignment with the identified Design Principles
- Selection of the European DigComp 2.1 framework<sup>11</sup> as the basis for an Australian framework
- A sophisticated, multi-stage analysis of the DigComp 2.1 framework against performance criteria from Australian training package qualifications using machine learning algorithms (referred to as Natural Language Processing – NLP)
- Adaptation of DigComp 2.1 to create a draft Australian Digital Capability Framework, which then underwent a comprehensive feedback and validation process.

<sup>10</sup> Australian Industry Standards Limited, (2022), Digital Capability for Workforce Skills Final Report 2022

<sup>11</sup> [https://joint-research-centre.ec.europa.eu/digcomp\\_en](https://joint-research-centre.ec.europa.eu/digcomp_en)

The ADIA has long been calling for the adoption of a common language for digital capability, and has advocated for the adoption of the ADCF as that language, presuming it is extended to cover the most foundational digital skills. We have previously proposed that this can be achieved by incorporating the pre-levels as articulated in the ACSF Digital Literacy Skills Framework, detailed above.

In its current form, the ADCF does not go far enough in terms of capturing foundational level digital skills. The Level of Proficiency labelled 'Foundation' (Levels 1-2), assumes a certain level of digital proficiency that does not adequately reflect the level of competence or understanding of many digitally excluded people.

#### *The importance of addressing foundation skills*

Many ADIA member organisations work with individuals in the cohorts most affected by digital exclusion. Organisations such as The Smith Family, Good Things Foundation, inDigiMOB and the Alannah and Madeline Foundation are working with individuals often taking their first steps to get online. In their experience, many of the people they are working with are not able to do the things described as Level 1 skills in the ADCF. In ADIA member experience, the foundational abilities outlined above cannot be taken for granted.

By extending the ADCF to add Pre Level 1A and Pre Level 1B, this would articulate the skills people need to begin their digital ability journey. The inclusion of Pre Level 1A and Pre Level 1B provides the articulation of what people need to be able to do in order to begin a journey of digital capability. It also provides guidance for organisations working with individuals – whether a registered training provider, an employer, or a community organisation – as to where to focus to get people started.

To illustrate this point we refer to the following examples:

#### **Mapping the Digital Gap**

The Mapping the Digital Gap<sup>12</sup> project, conducted by the ARC Centre of Excellence for Automated Decision Making and Society in partnership with Telstra, is working with 10-12 remote First Nations communities over three years, investigating the distribution of digital inclusion across Indigenous communities. Project researchers have found that participants overwhelmingly rely on mobile devices, and while there is an appetite for more functional devices and accompanying skills, without device access the participants are unlikely to move beyond the skills outlined in Pre Level 1A above. This also means participants lack foundational skills such as utilising a mouse and keyboard, and are unable to use basic programs such as word processors or spreadsheet software. Additionally, low levels of English literacy and prevalent accessibility issues – such as poor hearing or eyesight – impact participants' ability to engage with digital devices.

#### **inDigiMOB**

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<sup>12</sup> <https://www.admscentre.org.au/mapping-the-digital-gap/>

inDigiMOB<sup>13</sup> is a partnership between First Nations Media Australia and Telstra which connects with remote Indigenous communities to improve digital inclusion and cyber safety awareness. Through their small group digital inclusion sessions, the inDigiMOB team has found that most participants lack basic digital skills assumed at Level 1 and above such as:

- Understanding the basic functions of a device.
- Identifying and opening a web browser.
- Setting up an email account; sending and receiving emails.
- Identifying, accessing and understanding different file types.

Reinforcing the continuum of digital abilities, and in line with the findings of Mapping the Digital Gap, inDigiMOB has found that a reliance on mobile devices has led to some community members being highly skilled in the use of mobile applications such as video editors, audio-visual communication tools and social media, however, they do not have the ability to open or operate a word processor to prepare a resume, for example.

#### **Neighbourhood Houses Victoria**

The Final Report of the Multicultural Digital Inclusion Project<sup>14</sup> prepared by Neighbourhood Houses Victoria highlights a range of digital ability challenges experienced in the community:

- A Kensington Neighbourhood House program where laptops were provided to families in need found that many families did not have the necessary skills or email accounts to easily set-up or use their device.
- It is not unusual for people presenting at Neighbourhood Houses for digital mentoring to never have operated a computer. For some participants, tasks such as connecting to a public Wi-Fi, browsing the internet and sending and receiving emails are complex tasks.

#### *Looking ahead - updating for Artificial Intelligence*

In addition to the lack of pre-levels, with the rapid surge in AI, the ADCF has become out of date. If it is to be valuable as the national common language for digital capability, such that it enables efficient communication and collaboration across sectors and industries, it must urgently be updated.

As noted above, the ADCF was adapted and modified from the 'Digital Competence Framework for Citizens' version 2.1 (DigComp)<sup>15</sup> developed for the European Commission and released in 2017.

DigComp 2.2<sup>16</sup> has since been adopted by the European Commission and deals with AI as follows:

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<sup>13</sup> <https://indigimob.com.au/>

<sup>14</sup> Neighbourhood Houses Victoria, (2022), *Final Report: Multicultural Digital Inclusion Project June 2021 - May 2022*

<sup>15</sup> Carretero Gomez, S., Vuorikari, R. and Punie, Y. (2017), DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, Publications Office of the European Union, Luxembourg, [https://joint-research-centre.ec.europa.eu/digcomp\\_en](https://joint-research-centre.ec.europa.eu/digcomp_en)

<sup>16</sup> Vuorikari, R., Kluzer, S. and Punie, Y., DigComp 2.2: The Digital Competence Framework for Citizens - With new examples of knowledge, skills and attitudes, EUR 31006 EN, Publications Office of the European Union,

*Today, for citizens to engage confidently, critically and safely with new and emerging technologies, including systems driven by artificial intelligence (AI), they need to acquire a basic understanding of such tools and technologies. Greater awareness will also lead to improved sensibility towards potential issues related to data protection and privacy, ethics, children’s rights and bias – including accessibility, gender bias and disabilities. The DigComp 2.2 update addresses the topic of citizens interacting with AI systems rather than focusing on the knowledge about Artificial Intelligence per se (DigComp 2.2, p. 77).*

DigComp 2.2 includes 73 competencies for citizens to engage confidently, critically and safely with AI systems and outlines the following requirements for citizens interacting with AI systems:

*Knowledge*

- *To be aware of what AI systems do and what they do not do*
- *To understand the benefits, limitations and challenges of AI systems*

*Skills*

- *To use, interact and give feedback to AI systems as an end-user*
- *To configure, supervise and adapt AI systems (e.g. overwrite, tweak)*

*Attitudes*

- *Human agency and control*
- *Critical yet open attitude*
- *Ethical considerations of usage.*

For more than a decade, DigComp has provided a common understanding, across the EU and beyond, of what digital competence is, and therefore has provided a basis for framing digital skills policy in various parts of the world. Additionally, DigComp has been validated with global organisations including UNESCO, UNICEF and the World Bank.

An example of DigComp’s practicality across industry and society, and in line with the potential use cases and expected benefits of the NST,<sup>17</sup> is DigComp’s incorporation into the Europass CV, enabling jobseekers to evaluate their own digital competence and include the evaluation in their resumes.

In the event that priority is not given to updating the ADCF, then in our view, the alternative is to recognise the European DigComp 2.2 as the appropriate common language for digital capability in Australia.

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Luxembourg, (2022), ISBN 978-92-76-48883-5, doi:10.2760/490274, JRC128415, <https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>

<sup>17</sup> Commonwealth of Australia (2024), National Skills Taxonomy Discussion Paper To inform the design of a National Skills Taxonomy, p. 10, [https://www.jobsandskills.gov.au/sites/default/files/2024-06/national\\_skills\\_taxonomy\\_discussion\\_paper.pdf](https://www.jobsandskills.gov.au/sites/default/files/2024-06/national_skills_taxonomy_discussion_paper.pdf)

We would welcome the opportunity to discuss this with you further. Please don't hesitate to be in touch with Ishtar Vij, convenor of the Australian Digital Inclusion Alliance, [ishtar@eloquium.com.au](mailto:ishtar@eloquium.com.au).

Yours faithfully,



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