



Starting Strong VII

Empowering Young Children in the Digital Age

Stéphanie Jamet

18 April 2023



➤ Digital technologies are increasingly present in children's lives, but the implications for early childhood education and care (ECEC) remain unclear

Young children



... use digital devices with increasing frequency and at increasingly early ages...

... interact with digital tools in a great variety of ways, steered by parents, other children, and the environment...

... potentially with both positive and negative impacts on their learning, development and well-being...

ECEC



... increasing sense of urgency to react to digitalisation...

... but with a low sense of preparedness and limited resources...

... seeking to exploit opportunities while avoiding risks, but unclear how to strike a balance...



Key outputs of the project



Report

- **Data from 30 countries and jurisdictions**
- **Policy roadmap** for making early childhood education and care (ECEC) responsive to digitalisation
- **Thematic chapters** on policy levers for developing high-quality and equitable ECEC

Supplementary outputs

- **6 country notes** - Canada, Finland, Japan, Korea, Norway, Sweden
- **20 case studies** - from 16 countries and jurisdictions
- **Data tables**
- **3 expert literature reviews**



Five key challenges for **early childhood education and care** in responding to digitalisation



Reducing digital divides



Protecting young children against digital risks



Enhancing quality interactions with children and families



Developing young children's early digital literacy



Supporting work processes and quality assurance

Each of these aspects brings opportunities and risks



Young children must be **better protected** in **digital environments**

Potential negative impacts of technology on young children include:

Physical and socio-emotional harms



Threats to privacy

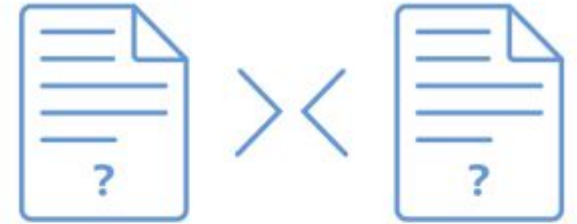


Only 28% of countries listed “Preserving ECEC digital-free” as a priority

Most countries and jurisdictions promote **safe and responsible use of technologies in ECEC**, rather than restrictive approaches, such as blanket bans



Conflicting and incomplete guidelines mean professionals may adopt approaches of variable quality



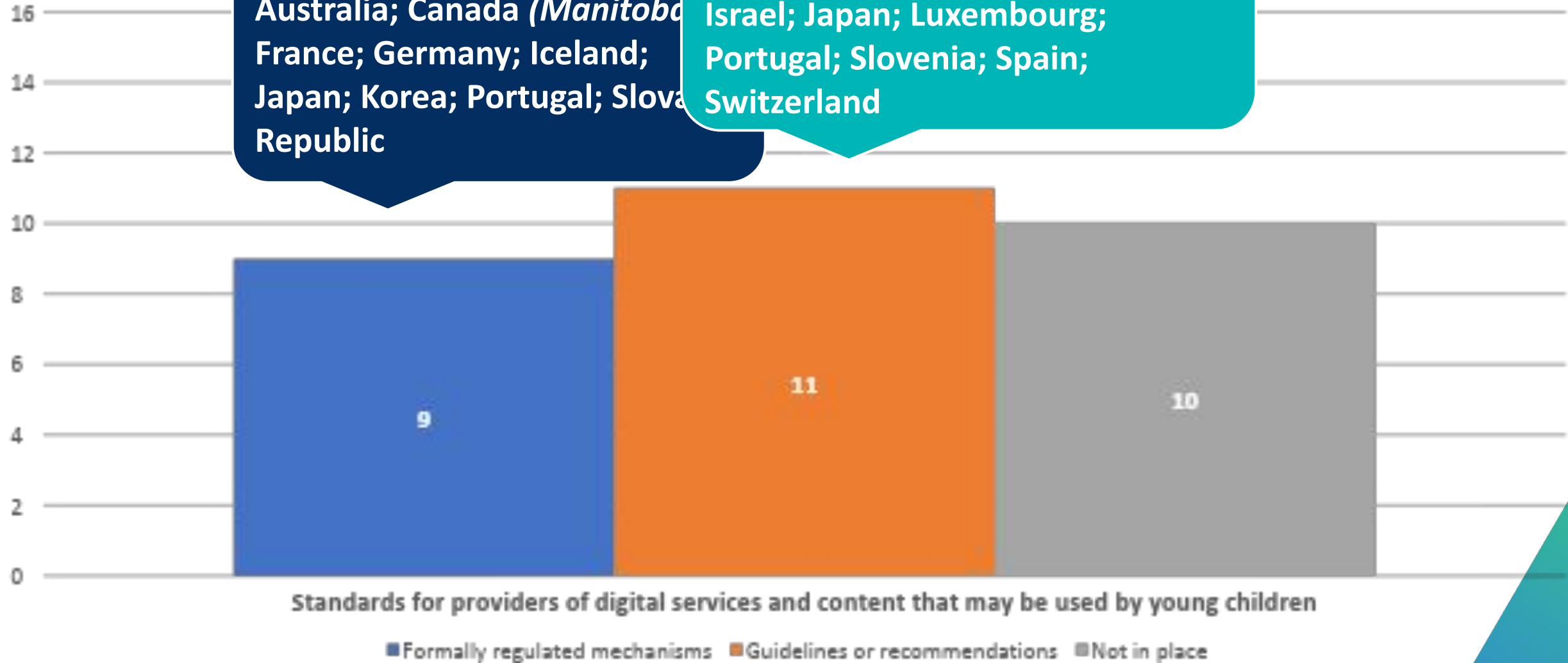
54% of countries reported having guidelines for ECEC staff on topics such as risks to children’s well-being, amount of screen time or privacy protection



Only 40 % of countries have standards or guidelines related to safety-by-design for digital service providers (2022)

Table 3.2 (2)

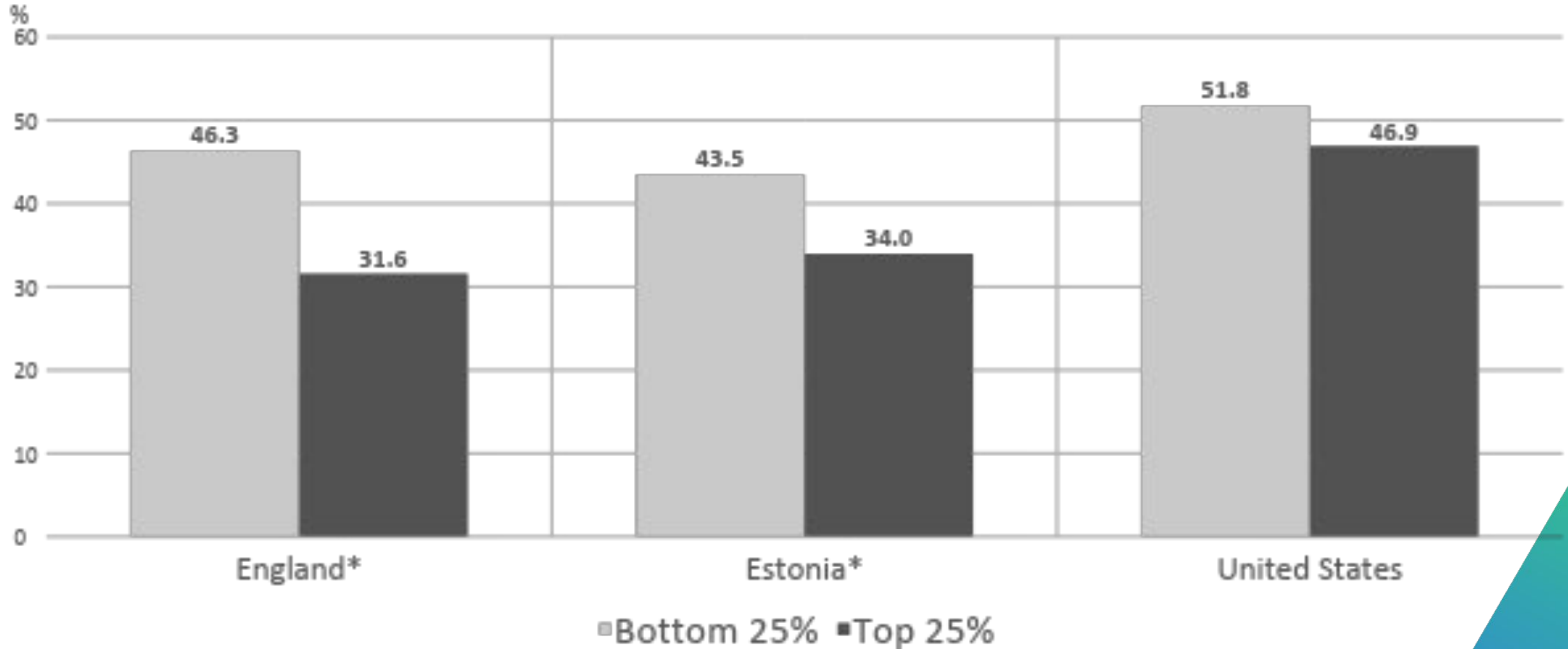
Number of responses



Children (5-year-olds) from disadvantaged families are more likely to be heavy users of digital devices (e.g. every day) (2018)

Figure 7.3 (2)

By family socio-economic status:





Digital divides need to be tackled from an early age

Introducing children to digital literacy in early education settings is key to **closing gaps in digital skills**



Early digital literacy skills can be introduced with minimal exposure to screens, using, for example, robotic kits and puzzles

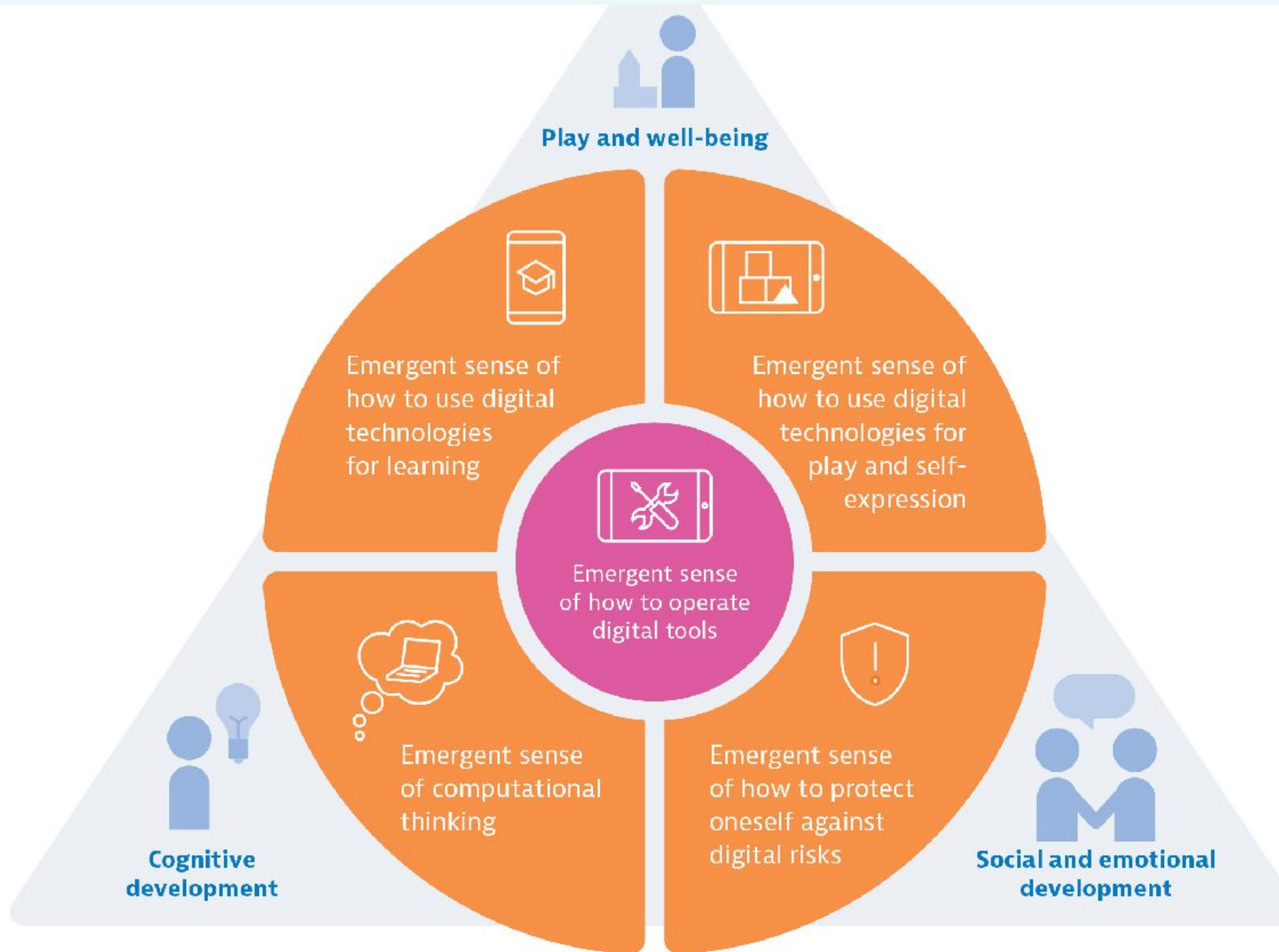


But few governments support this

Only 41% of countries reported supporting the provision of “unplugged” material



What are the key dimensions of early digital literacy?



Almost 50% of countries lack **specific goals for early digital literacy in curriculum framework (2022)**

Figure 4.4

For age 0 to 5/primary school entry

Early understanding of:

How to create and modify digital content

How to communicate using digital technologies

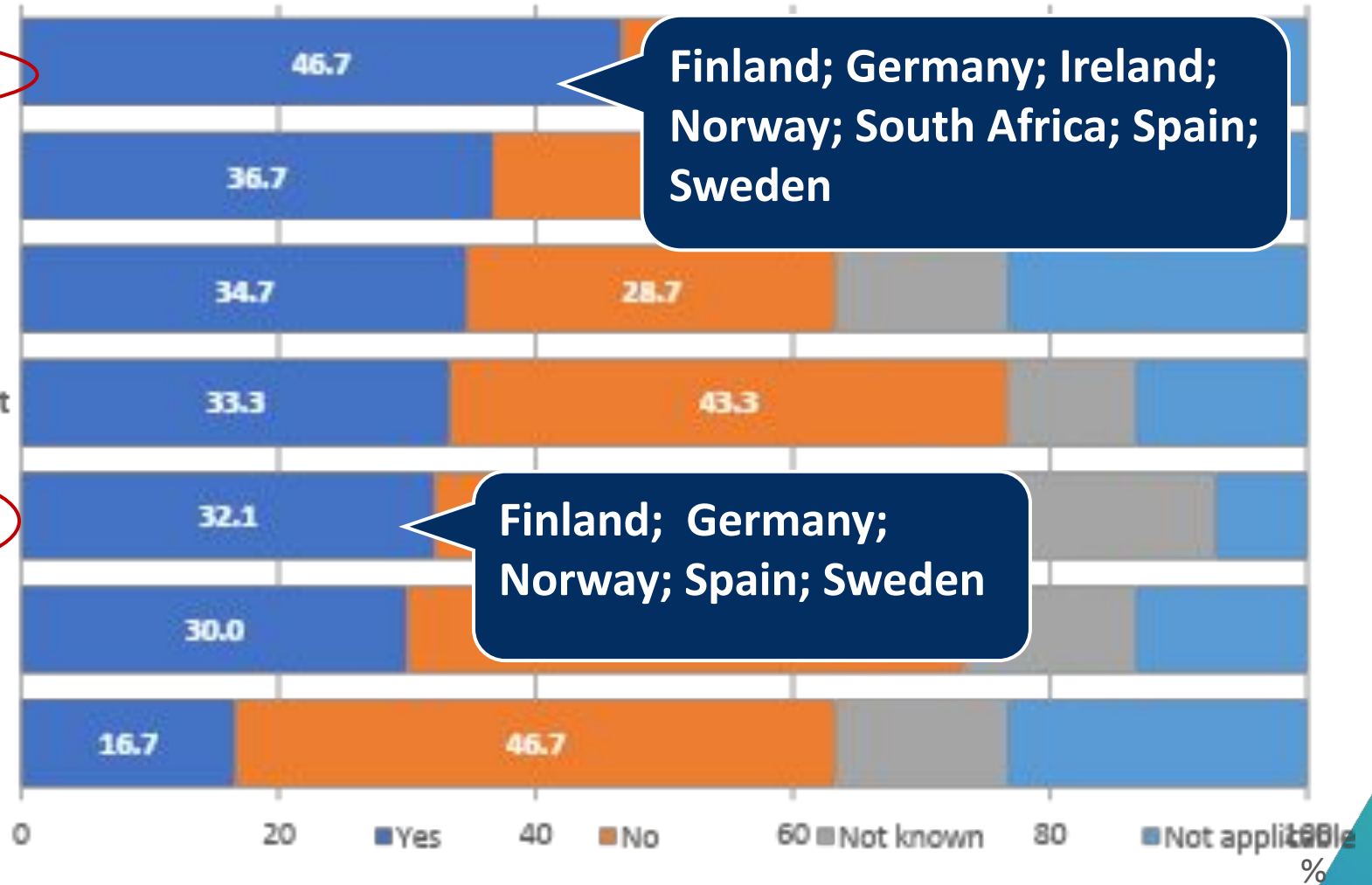
How to use digital devices

Self-awareness and respect in a digital environment

Digital risks

How computers and programming work

Healthy habits in using digital technologies



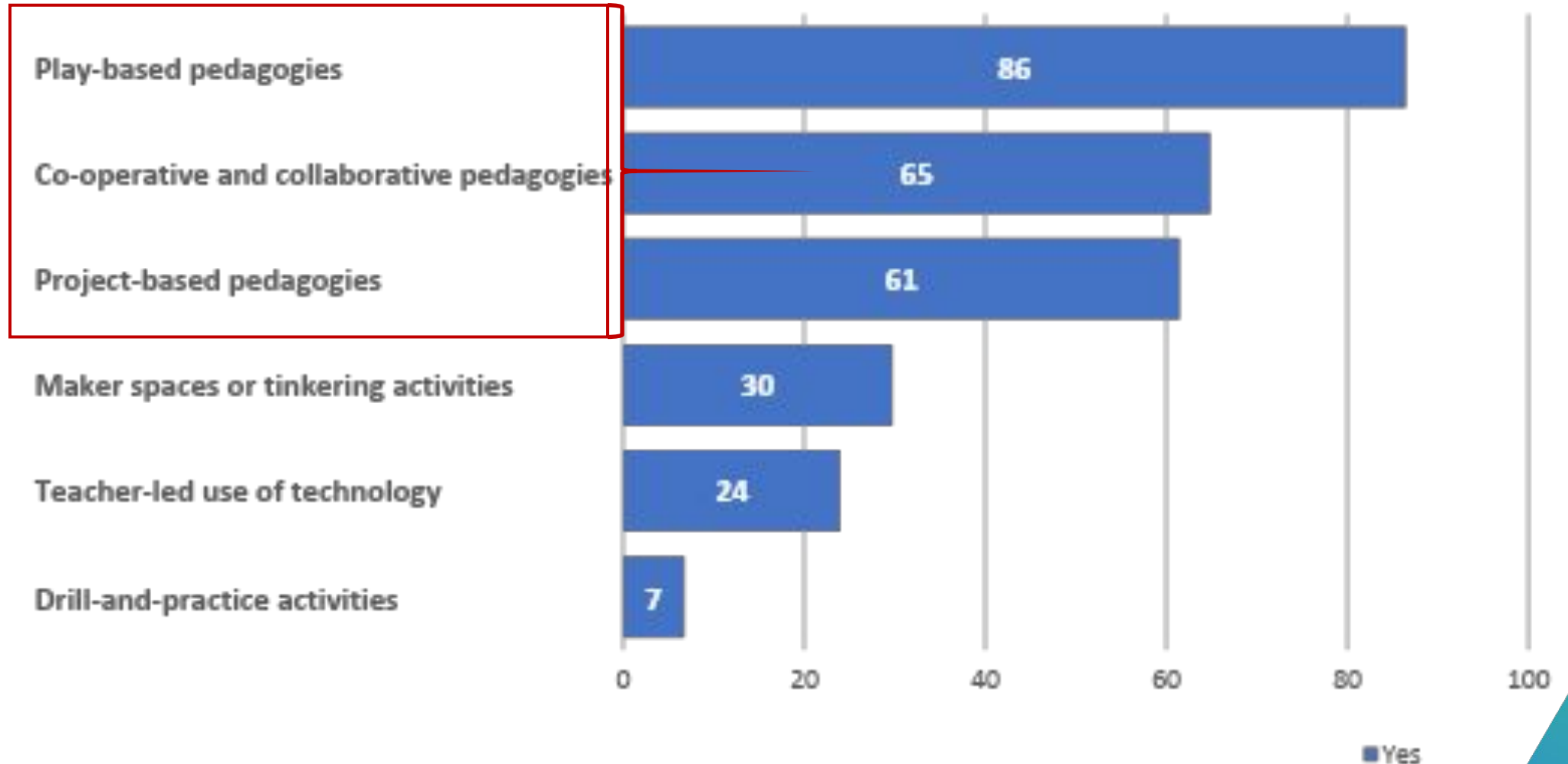
Finland; Germany; Ireland; Norway; South Africa; Spain; Sweden

Finland; Germany; Norway; Spain; Sweden

Curriculum frameworks tend to specify pedagogies that are interactive and play-based for using digital technologies with young children (2022)

Figure 4.6

For age 0 to 5/primary school entry





Early childhood professionals are central to a policy roadmap

All staff need foundational training to use digital technologies safely and effectively



Staff with specific responsibilities can be supported to develop **enhanced** or **specialised** digital skills

In most countries, digital competencies are commonly included in initial education programmes for ECEC teachers, but not formally required, with exceptions in Denmark and Luxembourg



A model for developing the **digital competencies** of the **ECEC workforce**

**3 levels
of
competencies...**

**... in 3
areas**

Pedagogical

Management
and leadership

Knowledge
development

For ECEC digital specialists – e.g. create and innovate in the digital space, share resources with colleagues and best practices for using technologies with children

For ECEC leaders and some ECEC teachers/lead staff – e.g. proactively implement safeguards, select digital resources, meeting reporting requirements

For all staff – some understanding of how digital technologies can be safely and meaningfully used with children



**Specialised
competencies**



**Enhanced
competencies**



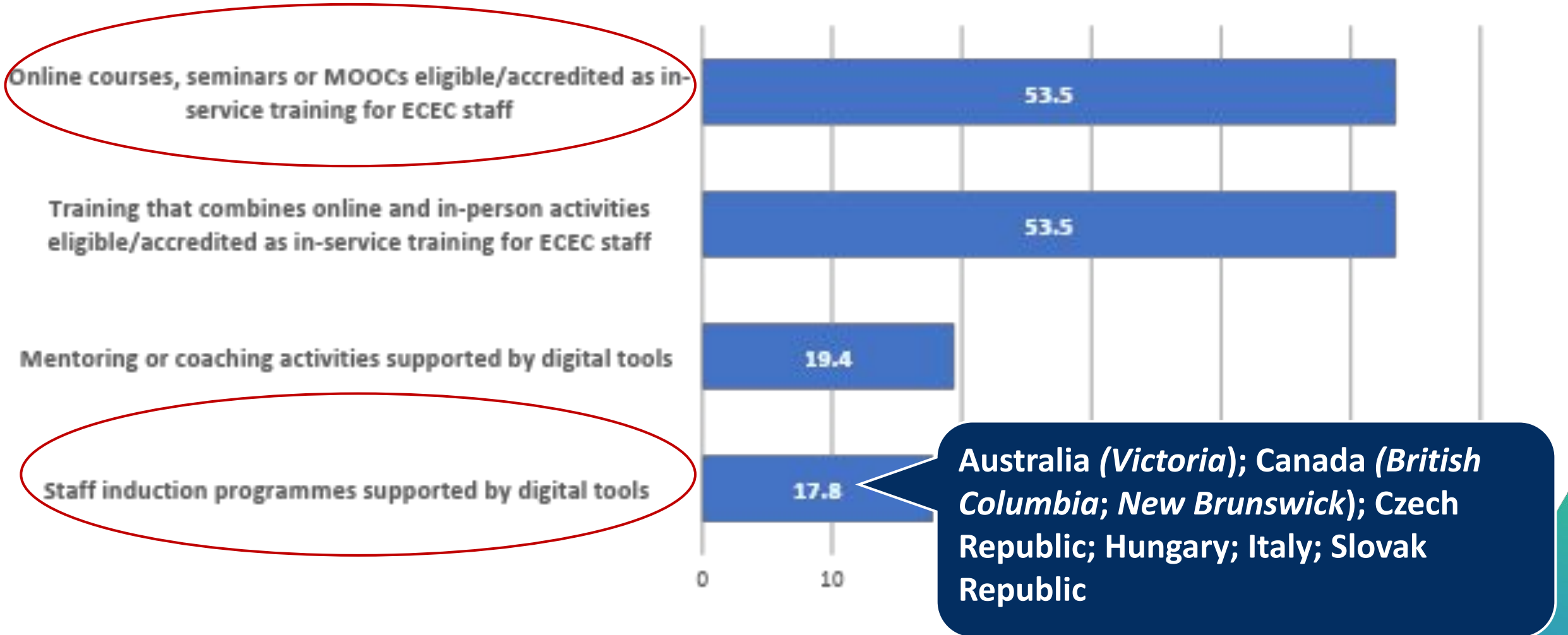
Foundational competencies
for safe and adapted uses of
digital technologies



Most countries support traditional approaches to continuous professional development (2022)

Figure 5.5

ECEC authorities provide funding for in-service training that uses digital tools :





15 policy pointers to make ECEC responsive to digitalisation

Policy levers:

- Guidelines and regulations
- Curriculum and pedagogy
- Workforce development
- Family engagement
- Monitoring and data
- Funding and infrastructure
- Governance

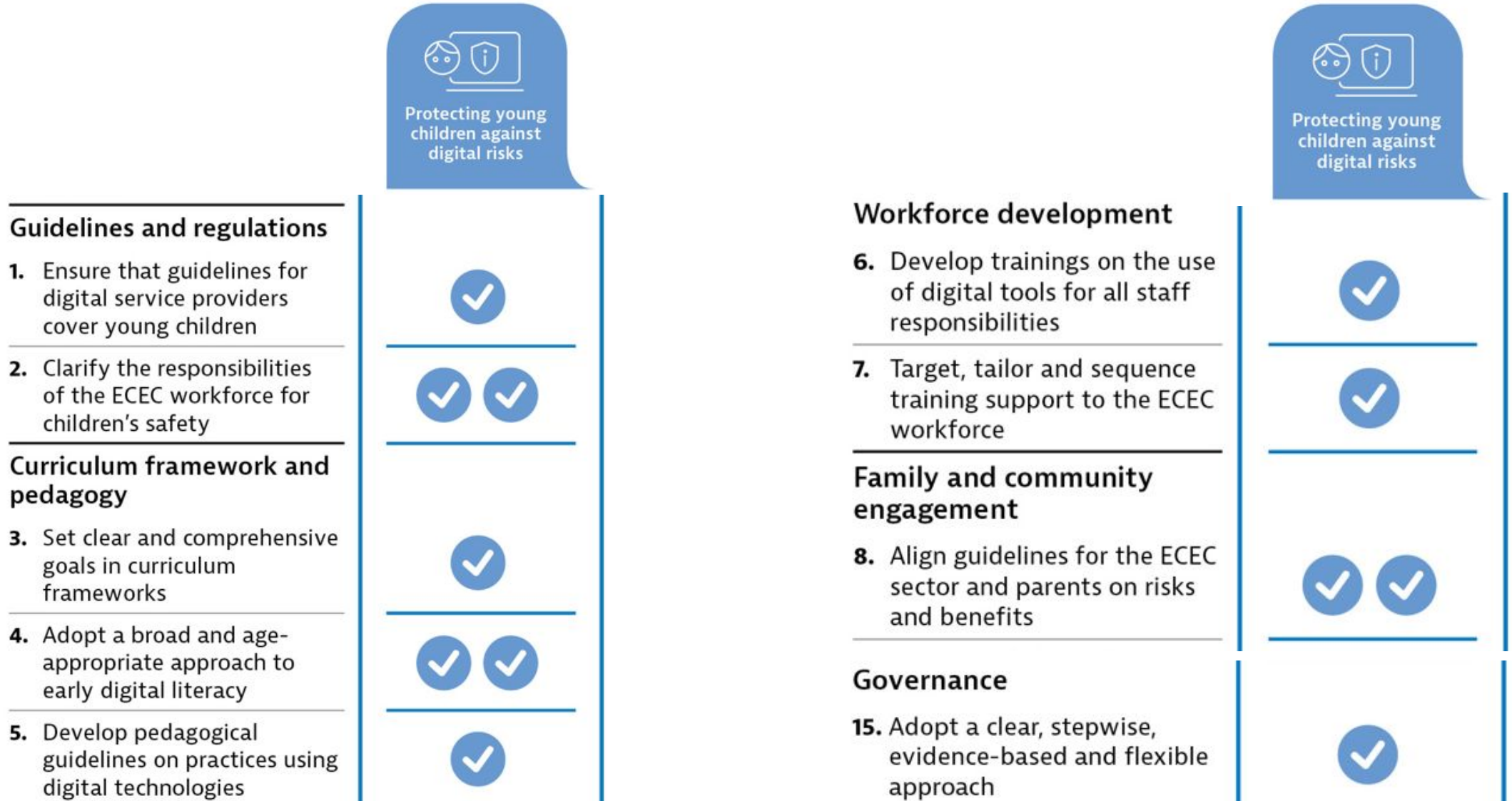
| Challenges | Protecting young children against digital risks | Reducing digital divides | Developing young children's early digital literacy | Enhancing quality interactions with children and families | Supporting work processes and quality assurance |
|--|---|--------------------------|--|---|---|
| Policies | | | | | |
| Guidelines and regulations | | | | | |
| 1. Ensure that guidelines for digital service providers cover young children | ✓ | | | | |
| 2. Clarify the responsibilities of the ECEC workforce for children's safety | ✓ ✓ | | | ✓ | |
| Curriculum framework and pedagogy | | | | | |
| 3. Set clear and comprehensive goals in curriculum frameworks | ✓ | ✓ | ✓ ✓ | ✓ ✓ | |
| 4. Adopt a broad and age-appropriate approach to early digital literacy | ✓ ✓ | ✓ | ✓ ✓ | | |
| 5. Develop pedagogical guidelines on practices using digital technologies | ✓ | | ✓ ✓ | ✓ ✓ | |
| Workforce development | | | | | |
| 6. Develop trainings on the use of digital tools for all staff responsibilities | ✓ | ✓ | ✓ | ✓ | ✓ ✓ |
| 7. Target, tailor and sequence training support to the ECEC workforce | ✓ | ✓ | | ✓ | ✓ ✓ |
| Family and community engagement | | | | | |
| 8. Align guidelines for the ECEC sector and parents on risks and benefits | ✓ ✓ | ✓ | ✓ | ✓ | |
| 9. Support a balanced use of digital technologies to connect with families | | ✓ | | ✓ ✓ | ✓ |
| Monitoring and data | | | | | |
| 10. Align quality monitoring frameworks | | | ✓ | ✓ ✓ | ✓ ✓ |
| 11. Strengthen the data infrastructure | ✓ | ✓ | | ✓ | |
| Funding and digital infrastructures | | | | | |
| 12. Support a consistent approach to digitalisation with adequate funding | | ✓ | ✓ | | ✓ ✓ |
| 13. Develop or support digital solutions for workforce training and work processes | | ✓ ✓ | | | ✓ ✓ |
| 14. Target funding to centres with higher shares of vulnerable children | | ✓ ✓ | | ✓ | |
| Governance | | | | | |
| 15. Adopt a clear, stepwise, evidence-based and flexible approach | ✓ | ✓ | ✓ | ✓ | ✓ |

Key challenges

15 pointers that synthesise strategies across policy levers




Example: Policy pointers for addressing the challenge of better protecting children in digital environments





Identifying countries and jurisdictions with a **consistent set of policies addressing a particular challenge, or active in specific areas**


Protecting young children against digital risks

Australia

Canada (Manitoba)

Luxembourg

Norway

Portugal

| Policy pointers | Examples of countries active on this pointer | Specific initiatives |
|--|---|---|
| Guidelines and regulations | | |
| <ol style="list-style-type: none">1. Ensure that guidelines for digital service providers pertinently cover young children2. Clarify the responsibilities of the ECEC workforce for children's safety in digital environments depending on their role, children's age and type of ECEC setting | <p>Australia, Germany, Norway, United Kingdom</p> <p>Australia, Germany, Luxembourg, Norway</p> | <p>Box 3.1: Germany, Japan, Sweden; Box 3.2: United Kingdom, United States</p> <p>Box 3.5: Canada, Netherlands, Norway, United Kingdom Case Studies: Australia, Norway</p> |
| Curriculum framework and pedagogy | | |
| <ol style="list-style-type: none">3. Set clear and comprehensive goals in curriculum frameworks for ECEC in light of digitalisation4. Adopt a broad and age-appropriate approach to early digital literacy in curriculum frameworks5. Develop pedagogical guidelines on practices using digital technologies and choices of digital material | <p>Finland, Germany, Israel, Luxembourg, Norway, Spain</p> <p>Belgium (3-5), Canada (Manitoba), Finland, Germany, Norway, Spain</p> <p>Finland, Japan, Norway, Portugal, South Africa</p> | <p>Box 4.1: Portugal</p> <p>Box 4.1: Canada (Manitoba), Finland Case Study: Israel</p> <p>Box 4.2: Finland, Japan, Norway, Portugal, South Africa Case Studies: Germany (2), Estonia, Lithuania, Norway</p> |

**Thank you for your
attention!**

<https://www.oecd.org/education/school/earlychildhoodeducationandcare.htm>

