

Input by the Dutch government following the call for evidence for the Council Recommendation “Digital Education – enabling factors for success”¹:

The initiative will cover all levels of education and training and will include recommending a number of targeted measures as indicated in the call for evidence. Before giving input on those possible measures, illustrated with relevant examples of Dutch policies and experiences, we would like to indicate a number of general considerations which are important for the Netherlands. We conclude this input with a number of other suggestions for the Recommendation.

General considerations

It is important that the planned Council Recommendation will leave **enough room to well-functioning national systems** (educational systems, lifelong learning policies adapted to the respective labour market contexts) and underlying national policy choices. The Netherlands would not support a Council Recommendation which directly influences national education policy in this area through a one-size-fits all approach. We do welcome however guidance on different policy options based on the experiences and good practices in different Member States and further relevant evidence. Regarding the content of education, and the national education curriculum, national competences and autonomy of educational institutions should be fully respected.

The Netherlands would not welcome **new monitoring requirements** as part of this planned Council Recommendation, as this indirectly could also lead to additional workload for education institutions. At the level of national governance, the yearly Digital Economy and Society Index (DESI)² in combination with the Digital Decade Decision already forms an appropriate framework. Specific frameworks, such as the agreement on the reporting about relevant objectives and indicators related to the realization of the European Education Area³ and the yearly Education and Training Monitor⁴, can further support these overarching frameworks.

As a consequence of the complexity of digital education, the rapid digital transition and enormous variety of situations and policies in the EU-27, a Council Recommendation on this issue can only be formulated in general and flexible terms. It would therefore be very effective when accompanied by **concrete, evidence based guidance and indications of possible support** for its implementation.

Specific remarks per measure

Promoting an integrated and coherent whole-government approach to the digital transformation of education and training

- A **government-wide approach**, including coordination at different levels of government, seems more relevant for the provision of digital skills (see hereafter) than for the digital transformation of initial education where education ministers are primarily responsible. In the Netherlands, the government-wide “National Growth fund” will substantially invest in digital education programmes in the next 8 years, as illustrated hereafter.
- An **integrated and coherent approach between all education sectors** is crucial, while taking into account differences between education sectors, also related to their different legal contexts. A good dialogue between education sectors is important and necessary to learn from each other, to promote common solutions and for seamless transitions between education sectors. Two guiding principles in such a dialogue within the Member States should, in our perspective, be: i) raising the **quality of education** and ii) a **responsible digital transformation** with attention for public values.
- **Initiatives at EU level for cooperation, exchange and support** (e.g. via the new Digital Education Hub) are relevant regarding the modalities of the digital transformation,

¹ Call for Evidence: [Faciliterende factoren voor succesvol digitaal onderwijs \(europa.eu\)](#)

² [The Digital Economy and Society Index \(DESI\) | Shaping Europe's digital future \(europa.eu\)](#)

³ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C_.2021.066.01.0001.01.ENG

⁴ [Education and Training Monitor | European Education Area \(europa.eu\)](#)

for example in areas such as organisation and logistical issues; standardization; (digital) sovereignty of the EU as a whole and shaping a common front to powerful global actors.

Provision of high-speed connectivity, digital technology solutions and digital content tailored to learning needs

- For the Netherlands, **high speed connectivity** is not a problem, with exception of the Caribbean parts of the Dutch Kingdom. Solving such issues is primarily a national responsibility, for which Member States could choose to use relevant EU funds.
- Regarding **digital technology solutions and digital content**, European cooperation could be helpful to support national policies regarding the following issues:
 - i. **negotiations with commercial publishers of digital education content**, who gain an increasing market power, which can lead to higher market prices and other market disturbances. Furthermore, they acquire large volumes of data of the students who use their platforms. By cooperation at EU level, education institutions could negotiate better conditions, enforce GDPR-compliance, and keep the data of their pupils and students in their own hands⁵.
 - ii. **cooperation regarding interoperable, open-source infrastructures for sharing open educational resources**. This enables sharing and re-using of learning resources and could help improving their quality. The outcomes of the recent EU-survey about the development of an “European Digital Education Content Framework⁶” and further steps will be relevant in this respect.
- If those issues would be effectively addressed (also) at the EU-level, this will not have impact on the content of education or on the choices of individual teachers or schools in this respect. On the contrary, it will contribute to their freedom of choice.

Development, monitoring and evaluation of institutional digitalisation strategies, with respect to equity and inclusion

- For the Netherlands, **autonomy of educational institutions** is an important constitutional condition. The development of individual institutional digitalisation strategies is therefore primarily a competence of the boards of those institutions. The impact on the quality of education will be verified by our Inspectorate.
- Encouraging digitalisation visions and their implementation will take place by the Dutch government, apart from general funding mainly by **dialogue and support**⁷, such as in the case of promoting joint procurement of digital infrastructures and resources. Incidentally there will be norm setting, for example regarding cyber security, information and knowledge security and privacy⁸.
- In the light of the governance of our education system, we see **limited possibilities and relevance of European recommendations which relate to institutional digitalisation strategies**, possibly with exception of issues with cross-border relevance such as security and privacy. We would support the idea of additional monitoring and evaluation of institutional strategies.
- As possible elements of the Council Recommendation, we could see the following elements: Education institutions should ideally put the **learner in the center** and they will assess how the content and quality of the education will be supported as good as possible by flexibilisation and digitalisation of the education in their institution. ‘Blended’ education will also be considered. Where necessary, the organisation of the institutions should also be adapted.
- The Dutch government recognizes that **equity and inclusion** are important considerations in the realization of digital education. There are both risks as well as opportunities.

⁵ In fact, the Dutch national authority for the protection of personal data (Autoriteit Persoonsgegevens) has advised the Dutch government to work towards this objective in its advice about the use of Google G Suite for Education in 2021 [Digitale leermiddelen | Tweede Kamer der Staten-Generaal](#)

⁶ [Digital Education Action Plan – Action 3 | European Education Area \(europa.eu\)](#)

⁷ In the Netherlands the organisations SURF en Kennisnet have an important in sharing knowledge about effective use of ICT in education and SIVON brings together educational institutions in procurement of digital infrastructures and resources to have more bargaining power vis-à-vis providers.

⁸ [Vaststelling van de begrotingsstaten van het Ministerie van Onderwijs, Cultuur en Wetenschap \(VIII\) voor het jaar 2022 | Tweede Kamer der Staten-Generaal](#)

- **Differences between pupils and students** can already be large, and possibly even enlarged by digital education. Dutch research also shows that pupils and students with a good starting position learn quicker. For example, adaptive learning tools asks for self-motivation. As children from higher educated families will have more self-motivation than children from lower educated families, digital education may thus increase differences in learning outcomes and development. Further, the access to hardware and software both at home and at school may differ and costs for devices are transferred by schools to parents. This may increase differences between learners and schools and decrease equity.
- On the other hand, the use of digital education may also **contribute positively to more equity**, for example by additional possibilities for individual support to children at risk and return to education after early school leaving. These include the possibility of distance education for learners in difficult situations (e.g. in case of handicap or for medical reasons); personalized learning and through the decreasing of the workload of teachers and supporting them in their education tasks.
- Realizing equity may be coupled with very **different challenges in different Member States**, such as differences between cities and countryside, or caused by migration and ethnic diversity. Every individual education institution needs to find answers in its own context⁹. For the Netherlands, it is important to also pay attention to the issue of gender identity and sexual orientation, in line with the approach by the European Commission in preparing the 2022 UN Committee on the Status of Women (CSW)¹⁰.

Professional development and support for teachers and educators, institutional leaders and support staff, including developing guidelines for digital pedagogy

- The Netherlands fully supports the importance of **adaptation of pedagogy and didactics to the digital transformation**. The biggest challenge, and critical success factor for successful digital education, is probably the educational content and a clear vision on the relation between ICT, didactics and pedagogy.
- The **initial training of teachers** in the Netherlands is implemented by higher education institutions, which determine the education programme autonomously. By supporting the programs through our National Growth Fund (NGF), we want to support schools and teachers. With the programme *Impuls Open Educational Resources (Impuls Open Leermateriaal)* for example we will support and train teachers in effectively using and develop open learning materials and we innovate and improve the public infrastructure for those materials, so that teachers can easily develop, find, share and use them. With the programme *Digitalisation Impuls*, teachers in VET and higher education will also be supported.
- **Possible EU guidelines for digital pedagogy** should take into account the diverse education systems, practices, cultures and concrete experiences. In a recent advice to the Dutch Education Minister, it was highlighted that there is still a lack of evidence regarding digitalisation in education¹¹. While this may be primarily a national challenge, we would also support initiatives by the EU to support more education research; support to research and innovation in digital education specifically in relation to pedagogy and support to sharing of research findings between Member States. Interesting questions are, for example, the (differences in the) relations between education institutions and commercial providers of digital technologies and services in the EU Member States; the effect of digital and adaptive learning programmes on the curriculum and school programmes and on flexibilisation of education; on workload of teachers; on citizenship and multilingualism, etc.

⁹ The Dutch organisation Kennisnet (www.kennisnet.nl) supports individual schools in this respect by guidance on digitalisation and equity: [06 Werkbestand-kennisnet-A1.indd](#) (in Dutch language only).

¹⁰ DG JUST contribution to CSW 2022 theme "Innovation and technological change, and education in the digital age for achieving gender equality and the empowerment of all women and girls". The Netherlands echoes the attention that the Commission pays to several aspects of the building blocks, i.e. gender mainstreaming, digitalization, AI and data, equal representation, women and girls in STEM, and managing the risks of digitalization and technological innovation.

¹¹ [Naar hoogwaardig digitaal onderwijs | Rathenau Instituut](#)

Fostering closer dialogue between education and training institutions and stakeholders

- The Netherlands fully recognizes the importance of a close dialogue between education and training institutions and other stakeholders, including **teachers** and their representative organisations.
- Furthermore, the **role of parents** is important, especially in the case of primary and secondary education.
- An important group to involve in the shaping of digital education are **students in VET and higher education**, including learners of all ages. Important issues at stake are for example: accessibility; the balance between physical and distance education; equal opportunities and inclusion; individual wellbeing and security. While this group may already be heard at national level, it would be beneficial to involve them also at EU level (e.g. as an European student platform).
- We also want to emphasize the **role of the private sector**, especially in relation to public-private cooperation in VET and higher education. In the Netherlands, the national Growth Fund will allow for upscaling public-private cooperation in VET, including projects related to ICT and digital skills¹².
- A good dialogue and concrete cooperation project between education institutions, especially in VET, and **societal organisations** can contribute to improving of digital skills of the whole population and digital inclusion (see also our input to Call for Evidence).

Supporting the use of digital technologies through accompanying measures such as rules and regulations on use

- A common characteristic of the Dutch education system is a high degree of **autonomy of the educational organisations** in our country, as based in our Constitution and education laws. Supporting the use of digital technologies by rules and regulation is something which needs careful consideration.
- At EU level, the EU Treaty does not allow rules in the area of education. However, **general legal frameworks at EU level** can have a large impact also on education institutions and use of digital tools as for example is the case for *General Data Protection Regulation (GDPR)*.
- Furthermore, the EU has recently proposed a number of **legislative proposals specifically in the digital domain**. The *Digital Services Act* and the *Digital Market Acts* could result in more balanced relations between public education institutes and private providers of digital technologies and services. The proposed *AI Act* could promote trust in the use of AI, such as through adaptive learning tools, as well as the announced Guidelines for teachers for the use of AI and data could do (Dutch experts have actively been involved in the preparation).
- Apart from these developments, the Netherlands would see further benefit in promoting at **standardization and harmonization of technological (ICT)solutions and ICT infrastructures for digital education** (e.g. via promoting common standards, open interfaces, interoperability) at EU level. In VET and higher education, where international cooperation between education institutions with cross-border operating companies and international mobility of students is common practice, the need for such initiatives is felt.
- In the Netherlands itself, work will be done to realize a **better ICT infrastructure for education** with help of the National Growth Fund, more specially by two programmes: *Digital Education Goed Geregeld*¹³ (Digital Education Well Organized) and the *Digitaliseringsimpuls*¹⁴ (Digitalization Impulse).

Supporting capacity-building of Member States, including by using benchmarking, exchange of best practices, twinning, peer review etc

- The Netherlands fully supports EU initiatives to support capacity-building of Member States, by using benchmarking (e.g. DESI), exchange of best practices, twinning, peer review, etc.

¹² [Overheid investeert in grootschalige omscholing - NLdigital](#)

¹³ [Digitaal Onderwijs Goed Geregeld | Projecten ronde 2 | Nationaal Groeifonds](#)

¹⁴ [Digitaliseringsimpuls onderwijs NL | Projecten ronde 2 | Nationaal Groeifonds](#)

We would like to add **surveys (like ICILS¹⁵), monitoring based on indicators; forecasting of future trends.** The administrative workload of surveys and monitoring for national administrations for education institutions should however stay proportional. Therefore, a good connection with existing (national) monitoring instruments¹⁶ is crucial. EU support could promote those initiatives and thus contribute to evidence-based national policies on digital education.

- With the same objective, the recently agreed **governance for realizing the European Education Area** should be fully exploited, especially the Working Group for Digital Learning and Training (DELTA) as well as the new **Digital Education Hub**. Exchange of best practices should not only take place between national governments and experts, but also between those more grassroots executive and consulting organisations who play a critical role in making digital education a reality in the Member States, taking concrete experiences of education institutions and professionals into account.
- As indicated earlier, **research and the resulting empirical evidence** is also crucial for evidence based education policy, for effective and efficient investments and capacity building at national and European level. Promoting and gathering such evidence may also be an activity within the announced EU 'Learning Lab for investing in education' which would give follow up the Expert Group set up earlier by the European Commission¹⁷.

Ensuring the effective use of EU funds and synergies with other sources of funding

- The Netherlands fully supports, within the existing programmes and framework of the **Multiannual Financial Framework 2021-2027**, the effective use of EU funds for innovative projects and for promoting intersectoral and international cooperation in the area of digital education.
- Through the **Erasmus+ programme 2021-2027**, the EU can promote initiatives for exchanging knowledge between individual education institutions (e.g. research, implementation, description of cases, physical exchange and networking); development of common ICT infrastructures and standards for digital education (to start with, within the alliances for European universities) and possibly the exchange of experiences of European students. In the Netherlands, digitalisation will be a national priority in the Working Programme 2023 for Erasmus+, like the case in 2022.
- **Synergies between EU programmes** should be fully exploited, between Erasmus+, Digital Europe, Horizon Europe, while other financial sources made available by the EU, such as the RFF, EFRO, ESF en the European Investment Bank could be used by and within the Member States. Investments in digital education are part of the Netherlands' Recovery and Resilience Plan (RFF) as endorsed by the European Commission on 8 September 2022.

Other suggestions for the Recommendation

- The Netherlands supports the focus the Czech EU Presidency is currently giving in the Council on the **well-being of students and pupils in digital environments**; these environments should be secure, inspiring and motivating. In the development and making available of digital education tools, there should always be attention for the social aspects, including the '*feeling of belonging*' to the education institution. The role of teachers in this respect is also crucial.
- In close relation this, for the Netherlands it is crucial to safeguard **public values and ethical aspects in digital education**, including the right to privacy of learners. We welcome all possible initiatives at EU level which could contribute to the objective. In the Netherlands, relevant initiatives are, for example, the *National Education Lab for Artificial Intelligence* (Nationaal Onderwijslab) AI¹⁸ and the joint activities by the organizations SURF and Kennisnet¹⁹. Main public values in their work are justice, humanity and autonomy. We

¹⁵ [ICILS 2023 | IEA.nl](#)

¹⁶ In the Netherlands, a monitor exists for Learning and Teaching with ICT in VET schools measuring ICT skills; in primary and secondary education a national monitor is being developed by Kennisnet. Furthermore, the Netherlands will participate in ICILS 2023.

¹⁷ [Quality investment in education and training: Commission publishes first findings of expert group | European Education Area \(europa.eu\)](#)

¹⁸ [Nationaal Onderwijslab | Projecten ronde 1 | Nationaal Groeifonds](#)

¹⁹ [Launch of the Values Compass in 2021 | SURF.nl](#)

would welcome to see such relevant national publications to be taken into account in any new EU initiatives and thus made more broadly known.

- Given the large dynamism of the private market, especially in the digital domain, all Member States should be aware of an overly-**large dominance of private market actors**. Education institutions should not be too dependent of digital solutions which only work in their own ecosystem (vendor lock-in). Privacy, freedom of choice and independence should be guaranteed, increases of prices and abuse of data should be prevented. To realize this, vertical integration should be prevented, and access of new actors to the market of digital learning tools should be encouraged. All governments, national and European, should have active policies in this respect. The Netherlands has also suggested in a recent Council debate the development of **public open-source alternatives for large private digital platforms to the Commission**²⁰. The Netherlands would welcome a continued dialogue with the Commission on the feasibility of this idea, also against the background of the forthcoming Recommendation.
- **Sustainability aspects of digital education** do not receive sufficient attention. Given the current energy crisis, this aspect is becoming more important. The Netherlands would welcome recommendations in this respect, e.g. regarding sustainability and energy use of digital infrastructures, but also schemes for reusing digital devices of public organisations and companies, which would also contribute to digital inclusion in society.

²⁰ Education, Culture, Youth and Sports Council, 29-30 November 2021.

Input by the Dutch government following the call for evidence for the Council Recommendation "Digital Skills – improving their provision"²¹

The initiative will include the recommendation of a number of targeted measures as indicated in the call for evidence. Before giving input on those possible measures, illustrated with relevant examples of Dutch policies and experiences, we would like to indicate number of general considerations which are important for the Netherlands.

General considerations

It is important that the planned Council Recommendation on Digital Skills will leave **enough room to well-functioning national systems** (educational systems, lifelong learning policies adapted to the respective labour market contexts) and underlying national policy choices. The Netherlands would not support a Council Recommendation which directly influences national policies in these areas with a one-size-fits all approach. We do welcome however guidance on different policy options based on the experiences and good practices in different Member States and further relevant evidence. Regarding the content of education and the national curriculum, national competences and autonomy of educational institutions should be fully respected.

The Netherlands would not welcome **new monitoring requirements** as part of this Council Recommendation, as this indirectly could also lead to additional workload for education institutions. At the level of national governance the yearly Digital Economy and Society Index (DESI)²² in combination with the Digital Decade Decision, forms already an appropriate framework. Specific frameworks such as the agreement on the reporting about relevant objectives and indicators related to the realization of the European Education Area²³ and the yearly Education and Training Monitor²⁴ can further contribute to these overarching frameworks.

As a consequence of the complexity of digital education, the rapid digital transition and enormous variety of situations and policies in the EU-27, a Council Recommendation on this issue can only be formulated in general and flexible terms. It would therefore be very effective, when it would be accompanied by **concrete, evidence based guidance and indications of possible support** for its implementation.

Specific measures

Promoting a consolidated understanding of high-quality education and training for digital skills at all levels, with a specific focus on informatics and its integration into school education and VET

- The Netherlands agrees that a **clear understanding, vision and strategy** is needed on both digital education (see also input on the Call for Evidence on *digital education - enabling factors for success*) as well as education and training for digital skills at all levels of education. Whether a 'consolidated understanding' is desirable and feasible remains to be seen given the different nature of education and training sectors. Digitalisation strategies in education are in the Netherlands bottom-up and sector focused.
- Our government is preparing a new **broader digitalisation policy** which will also address the need to promote **basic digital skills as well as more advanced digital skills for children and adults**. This involves the understanding and knowledge about technology, information skills and critical thinking as opposed to functional skills. Other activities will focus on improvement of monitoring, innovation of educational methods, identifying specific target groups and prevention through digital skills in primary and secondary education, but also a parents-children approach and the increased involvement of municipalities.
- In the Netherlands, a major **curriculum reform in primary and secondary education** is ongoing. The focus in Dutch primary and secondary education is on creating a structural

²¹ [Digitale vaardigheden — verbetering van het aanbod \(europa.eu\)](https://european-council.europa.eu/media/e3000000/1/press-18-10-2020-01.pdf)

²² [The Digital Economy and Society Index \(DESI\) | Shaping Europe's digital future \(europa.eu\)](https://ec.europa.eu/economy_finance/en/digital-economy-and-society-index-desi)

²³ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=uriserv:OJ.C_.2021.066.01.0001.01.ENG

²⁴ [Education and Training Monitor | European Education Area \(europa.eu\)](https://ec.europa.eu/eurydice/en/education-and-training-monitor)

place for digital literacy in the overall curriculum, in balance with other learning objectives. After the political decision to proceed early 2022, the adaptation of the core learning objectives ('kerndoelen') has started for primary education and the first years of secondary education, including for digital literacy. Secondly, the examination programmes for preparatory vocational education (vmbo), general secondary education (havo) and preparatory scientific education (vwo) has started. Implementing of the new curriculum could start in the schoolyear 2024/2025. In the meantime, a broad support structure on basic skills (including digital skills) is under construction and monitoring will be further developed. Next to our participation in the ICILS 2023 survey, our Inspectorate will implement surveys in primary education end of 2024 and in secondary education end of 2027²⁵. Schools will continue to set their own priorities and can receive support from partner organisations.

- **Informatics/programming/coding and ICT** currently does not have a separate place within the Dutch curriculum for primary education, while informatics and information technology are facultative subjects in secondary education. In the renewed curriculum, informatics and ict will have a place next to broader ICT basic skills, media literacy, information skills and computational thinking. Digital literacy will benefit from strong general basic skills, such as literacy and numeracy skills, evidence shows, and education in digital skills. These can also be part of education in basic skills (and also be part of education in citizenship, history or economy). Furthermore, there should also be attention for the education in other soft skills which can contribute to effective use of digital tools in school, work and society. These include personal, social and learning to learn competence, creativity and problem solving skills²⁶.
- A new Dutch policy agenda for **VET, scheduled** to be published later this year will also deal with digitalisation issues. The support by our National Growth Fund to the programme *Digitaliseringsimpuls* will also enable to improve digital skills in **VET (and higher education)**. In the Dutch VET sector, the program "*Doorpakken op digitalisering*" had in recent years digital citizenship as a focus area. In the coming years the support activities will be continued by the new Dutch Expertise Point Citizenship²⁷.
- Furthermore, achieving targets for digital education goes hand in hand with **establishing a learning culture**. Targeting specific learning objectives such as digital skills will be easier when lifelong learning is a common practice. Lifelong learning is a shared responsibility of the government, employers, educational institutions and individuals in the Dutch context and most other EU Member States. Governmental policy measures regarding lifelong learning are complementary to the initiatives of the social partners in The Netherlands. The various Dutch policies are, however, generic in nature and not specifically aimed at reskilling and/or upskilling of digital skills.

Supporting the development of multi- and trans-disciplinary higher education courses in cutting edge technologies

- The Dutch state **does not directly support the development of higher education courses**, and considers this a responsibility for the autonomous HEIs themselves, within their lump-sum financing received by the State. We would therefore not support a too strong focus on such courses in the forthcoming Recommendation.
- We welcome, however, recommendations to **exploit all possibilities for EU support** (e.g. via Erasmus+ and/or Digital Europe) for bottom-up initiatives leading to more education opportunities in cutting edge technologies if they are initiated by individual or cooperating HEIs, including support to initiatives by the alliances of European Universities.

Addressing some of the economic/social challenges related to digital skills gap between rural and urban areas, the lack of ICT higher education students, or the representation of women in the sector

²⁵ <https://www.onderwijsinspectie.nl/onderwerpen/peil-onderwijs/uitgevoerde-en-komende-peilingsonderzoeken>

²⁶ See also Council Recommendation on key competences of 22 May 2018, [Council Recommendation of 22 May 2018 on key competences for lifelong learning Text with EEA relevance. \(europa.eu\)](#).

²⁷ [Expertisepunt Burgerschap - School en veiligheid](#)

- For the Netherlands, the **rural-urban divide** is not a very relevant theme, although the rural population is slightly less digitally skilled according to Eurostat, and the situation is different in the Caribbean parts of our Kingdom.
- We would support effective recommendations regarding **reskilling and upskilling, adult learning, lifelong learning** related to the needs at regional level, **increasing the participation by students in ICT-education** and improving the **representation of women and other underrepresented groups in the ICT-sector**.
- These recommendations could be based on best practices within the EU, such as the *Grand Ecole Numeriques* in France and the *Taskforce Diversity and Inclusion* in the Netherlands²⁸, and suggest possibilities for EU support for relevant initiatives.

Supporting best practices for the provision of digital skills, including the development and sharing of related content

- We support initiatives for the **sharing of best practices and national policy experiences** and the collection of **international empirical evidence**, as well as for **upscaling best practices**. The Netherlands would in particular also welcome the sharing of best practices in professionalizing and supporting **volunteers in digital skills**. Due to a lack of ICT teachers we are highly dependent on volunteers. We welcome possibilities for **EU support** (e.g. via Erasmus+ and/or Digital Europe) for such practical initiatives.
- For **sharing of content** related to the provision of skills at EU level we see especially potential to promoting interoperability of initiatives in this area (see also our input on the Call for Evidence *digital education - enabling factors for success*).
- We could see a role for the EU to support initiatives within SMEs and industry to develop **digital skills of employees** (e.g. via the Digital Innovation Hubs).

Supporting the recruitment of specialized teachers and the provision of professional development for upskilling generalist teachers

- The **recruitment of specialized teachers and upskilling of general teachers** is a matter for national institutions in the Netherlands. While we see the need for modernized (continued) education for teachers, we do not see clear added value for EU recommendations in this respect. We could see potential of EU support for initiatives in this area (notably via the Erasmus+ programme).

Fostering digital skills assessment, certification, and mutual recognition

- Regarding **digital skills assessment**, we are aware of the work being done by the Commission in this area, such as the SELFIE instrument²⁹ and DigComp³⁰. The Recommendation could make those instruments better known. In the Netherlands we see the use of such instruments, including our national ones³¹, more as a means to start a dialogue resulting in action than as an objective in itself.
- The Netherlands is looking forward for evidence about the feasibility and necessity of initiatives by the EU towards **certification and (mutual) recognition of digital skills**.
- This requires also **clear definitions of various levels in digital skills**. For basic digital skills, these definitions are more uniform than the definitions in critical thinking and understanding of technology. We also want to emphasize the need to avoid to define and work with too specialistic digital skills, given the high speed of innovation and technological and market developments. We rather see the need to foster the skill(s) to learn in dynamic and complex environments.
- In the *Dutch Human Capital Agenda ICT* we support public private cooperation that enhances the development and use of digital skills, certification and mutual recognition. For the *Dutch labour market monitor for ICT* there are differences in definitions per region, and also between the Dutch statistical office CBS, the ROA en Eurostat there are differences in

²⁸ [Diversiteit binnen de digitale sector- Taskforce D&I \(taskforcediversiteit.nl\)](https://www.taskforcediversiteit.nl/)

²⁹ [SELFIE | European Education Area\[1308863585\] \(europa.eu\)](https://ec.europa.eu/education/skills-competence-development/docs/SELFIE-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2356-2357-2358-2359-2360-2361-2362-2363-2364-2365-2366-2367-2368-2369-2370-2371-2372-2373-2374-2375-2376-2377-2378-2379-2380-2381-2382-2383-2384-2385-2386-2387-2388-2389-2390-2391-2392-2393-2394-2395-2396-2397-2398-2399-2400-2401-2402-2403-2404-2405-2406-2407-2408-2409-2410-2411-2412-2413-2414-2415-2416-2417-2418-2419-2420-2421-2422-2423-2424-2425-2426-2427-2428-2429-2430-2431-2432-2433-2434-2435-2436-2437-2438-2439-2440-2441-2442-2443-2444-2445-2446-2447-2448-2449-2450-2451-2452-2453-2454-2455-2456-2457-2458-2459-2460-2461-2462-2463-2464-2465-2466-2467-2468-2469-2470-2471-2472-2473-2474-2475-2476-2477-2478-2479-2480-2481-2482-2483-2484-2485-2486-2487-2488-2489-2490-2491-2492-2493-2494-2495-2496-2497-2498-2499-2500-2501-2502-2503-2504-2505-2506-2507-2508-2509-2510-2511-2512-2513-2514-2515-2516-2517-2518-2519-2520-2521-2522-2523-2524-2525-2526-2527-2528-2529-2530-2531-2532-2533-2534-2535-2536-2537-2538-2539-2540-2541-2542-2543-2544-2545-2546-2547-2548-2549-2550-2551-2552-2553-2554-2555-2556-2557-2558-2559-2560-2561-2562-2563-2564-2565-2566-2567-2568-2569-2570-2571-2572-2573-2574-2575-2576-2577-2578-2579-2580-2581-2582-2583-2584-2585-2586-2587-2588-2589-2590-2591-2592-2593-2594-2595-2596-2597-2598-2599-2600-2601-2602-2603-2604-2605-2606-2607-2608-2609-2610-2611-2612-2613-2614-2615-2616-2617-2618-2619-2620-2621-2622-2623-2624-2625-2626-2627-2628-2629-2630-2631-2632-2633-2634-2635-2636-2637-2638-2639-2640-2641-2642-2643-2644-2645-2646-2647-2648-2649-2650-2651-2652-2653-2654-2655-2656-2657-2658-2659-2660-2661-2662-2663-2664-2665-2666-2667-2668-2669-2670-2671-2672-2673-2674-2675-2676-2677-2678-2679-2680-2681-2682-2683-2684-2685-2686-2687-2688-2689-2690-2691-2692-2693-2694-2695-2696-2697-2698-2699-2700-2701-2702-2703-2704-2705-2706-2707-2708-2709-2710-2711-2712-2713-2714-2715-2716-2717-2718-2719-2720-2721-2722-2723-2724-2725-2726-2727-2728-2729-2730-2731-2732-2733-2734-2735-2736-2737-2738-2739-2740-2741-2742-2743-2744-2745-2746-2747-2748-2749-2750-2751-2752-2753-2754-2755-2756-2757-2758-2759-2760-2761-2762-2763-2764-2765-2766-2767-2768-2769-2770-2771-2772-2773-2774-2775-2776-2777-2778-2779-2780-2781-2782-2783-2784-2785-2786-2787-2788-2789-2790-2791-2792-2793-2794-2795-2796-2797-2798-2799-2800-2801-2802-2803-2804-2805-2806-2807-2808-2809-2810-2811-2812-2813-2814-2815-2816-2817-2818-2819-2820-2821-2822-2823-2824-2825-2826-2827-2828-2829-2830-2831-2832-2833-2834-2835-2836-2837-2838-2839-2840-2841-2842-2843-2844-2845-2846-2847-2848-2849-2850-2851-2852-2853-2854-2855-2856-2857-2858-2859-2860-2861-2862-2863-2864-2865-2866-2867-2868-2869-2870-2871-2872-2873-2874-2875-2876-2877-2878-2879-2880-2881-2882-2883-2884-2885-2886-2887-2888-2889-2890-2891-2892-2893-2894-2895-2896-2897-2898-2899-2900-2901-2902-2903-2904-2905-2906-2907-2908-2909-2910-2911-2912-2913-2914-2915-2916-2917-2918-2919-2920-2921-2922-2923-2924-2925-2926-2927-2928-2929-2930-2931-2932-2933-2934-2935-2936-2937-2938-2939-2940-2941-2942-2943-2944-2945-2946-2947-2948-2949-2950-2951-2952-2953-2954-2955-2956-2957-2958-2959-2960-2961-2962-2963-2964-2965-2966-2967-2968-2969-2970-2971-2972-2973-2974-2975-2976-2977-2978-2979-2980-2981-2982-2983-2984-2985-2986-2987-2988-2989-2990-2991-2992-2993-2994-2995-2996-2997-2998-2999-3000)

³⁰ [JRC Publications Repository - DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: the Conceptual Reference Model. \(europa.eu\)](https://ec.europa.eu/education/skills-competence-development/docs/JRC-Publications-Repository-DigComp-2.0-The-Digital-Competence-Framework-for-Citizens-Update-Phase-1-the-Conceptual-Reference-Model-(europa.eu))

³¹ E.g. handreiking ict-bekwaamheid <https://www.kennisnet.nl/handreiking-professionalisering-ict-bekwaamheid/>

terminology and definitions. Improvements in this area, as part of the Recommendation, could be helpful and could also contribute to realization of the EU-target of 20 million ICT workers in Europe.

- It would be relevant to make a link in the Recommendation with the recently adopted **EU Council Recommendation on microcredentials**³². In the Netherlands, different projects are being implemented in the area of micro-credentials and digital certification (such as edubadges)³³.

Strengthening synergies between the formal education and training sector with the private sector and the civil society.

- We support promoting **synergies between the formal education and training sector with the private sector and the civil society**. Apart from existing initiatives at EU level (e.g. in the context of the Skills Agenda), such synergies need to be shaped especially at national and regional level.

³² [Council recommends European approach to micro-credentials - Consilium \(europa.eu\)](#)

³³ [Position paper by the Netherlands in the context of the public consultation of the European Commission on "Micro-credentials for lifelong learning and employability" | Kamerstuk | Rijksoverheid.nl](#)