The Netherlands
Non-paper on the 2020 update of the EU Digital Education Action Plan (DEAP)

1. Introduction

Technology is changing our lives since millennia, but the speed in which this happens accelerates. Computing power of processors grows exponentially, storage of data is getting cheaper and cheaper. Technological and digitally driven changes are accompanied by a high degree of uncertainty and unpredictability, but offer chances as well. In order to optimally seize the opportunities of the digital transition, we need to uphold our European values and ethics, also ensuring that all citizens can reap the benefits of digitalisation.

With the technological changes, our attitudes towards digital and technological issues are changing as well. Education has also to adapt to the new circumstances, both in the way education is given as well as in order to prepare citizens for the new digital reality in the labour market and society, including by adequate digital skills and from a lifelong development perspective.

Last but not least, the **COVID-19 crisis** has given an unexpected and unprecedented impetus to distance learning via digital tools. To realise distance learning during the closure of schools and universities, digital tools and learning contact have played an important role. Many teachers have started in creative and innovative ways to shape digital education at an unprecedented scale and speed. In the context of our national digitalisation strategy, the skills and competences of teachers especially in primary and secondary education will receive further attention. In higher education an enormous progress has been realised in innovation in education by ICT. A particular challenge has been examination at distance (online proctoring). Our Inspectorate (Onderwijsinspectie) has indicated that a large majority of pupils have been reached by distance learning. The background of parents, language obstacles or personal circumstances may however prevent good distance learning. This may result in backlogs and lower learning results. Lessons can and should be drawn from this period. But of course, digital education has many more structural aspects and objectives.

In a nutshell, against this background, the Netherlands welcomes the update of the Digital Education Action Plan as announced. While the current goals and measures of the 2018 Digital Education Action Plan are still highly relevant, there are new developments such as **the acceleration of the digital transition and notably the emergence of artificial intelligence (AI).** This results in **new skills and training needs** and **new ethical questions**, e.g. regarding the use of educational data and the accessibility of digital education for all.
It is also desirable that not only the digitisation of primary, secondary and higher education are considered, as is currently the case, but **also vocational education and training and lifelong learning**. In light of the ongoing digitalisation and its potential consequences for the labour market, the importance of lifelong learning can only be emphasized as it is a valuable instrument to prepare people for the new requirements of working life and jobs of the future. A good balance should however be struck between the focus on more **advanced digital skills** on the one hand **and basic skills and digital literacy** on the other.
Regarding education in and preparing for advanced digital skills, there is a link with **developments and skills need in science.** The impact of digitization of science is noticeable in all areas. The way of collection, analysis, sharing and presentation of research data and sources are changing rapidly. The scope and the complexity of data sets are increasing.
Even if we consider certain themes and objectives regarding digital education important to be addressed at EU level, we also consider that concrete **'delivery mechanisms'** should always have clear added value for the national policies. Measures at EU level must have added value for the national digitization policies in education. Knowledge exchange and cooperation and support in experiments, pilot projects and scaling up successful projects are examples of this.
This clearly requires a **good connection with the new EU subsidy programmes**.

2. Priorities and recommendations for the updated DEAP

The Netherlands considers a DEAP useful for our national policy development regarding digitalisation in education. For the development of national policy, it is useful to see an analysis at EU level. We also consider there is added value for all Member States and the EU as a whole for the Commission to promote developments and exchange of policy evidence in this area, with as overall aim, as stated also in the Treaty, to improve the quality of education. The recent COVID-19 crisis has made this even clearer. We consider a DEAP and underlying analysis also as a good basis for increasing awareness and debate at Council level, with a view to necessary reforms in national education policies. The action plan will also help developing adequate EU support to national policies and educational institutions by the Erasmus+ programme and other EU programmes. Also, it will facilitate voluntary cooperation and exchange between Member States at policy level.

The Netherlands considers the initiative of the DEAP and the three priorities still highly relevant. However, we see also room for improvement for the updated DEAP:

1. **Political attention**. The current action plan has not resulted in a large political attention at EU/Council level following its publication in 2018[1], and the implementation since then has remained rather invisible for us as well. Also in the light of the COVID-19 crisis and necessary expansion of digital education, the challenge is to use the update of the DEAP to increase the political attention for digital education both at EU level and national level (including national parliaments).
2. **Link with other processes, initiatives and funding programmes**. Digital education can contribute to the objective to further develop the European Education Area. The synergies with other EU funding programmes, notably Erasmus(+), Horizon Europe and the new Digital Europe Programme 2021-2027 could be more explicit. We would also like to refer to other policy initiatives under the Green Deal and the digital strategy initiatives; mapping clear synergies will help implementing the DEAP in a consistent and efficient manner.[2]
3. **Covering all types of education**. We favour an approach that covers all types of education: primary, secondary, tertiary/higher education and VET sectors of formal education, as well as an orientation towards lifelong learning and adult learning including informal learning (not excluding specific measures and priorities for the different education sectors). Strong digital skills should become commonplace among both students and teachers at all levels, and broader in society among adults and employees.
4. **Flexibility.** We acknowledge the fact that some of the current actions that are less applicable for the Netherlands, could be crucial for and in other Member States. Of course there are different developments and opinions regarding various aspects of digitalisation in education in the Member States. Furthermore, different education levels and settings may need different approaches. The new DEAP should cater for this diversity of situations.
5. **Implementation.** There should be more attention for (governance of) implementation. See our suggestions hereafter.

We also would welcome (more) attention for the following additional issues under the three main objectives (suggesting also to broaden the third objective):

1. **Making better use of digital technology for teaching and learning**, with more focus on the relation to labour market and lifelong learning:
    - We also would welcome more focus on the **development and market aspects of digital learning and examination resources and tools**, with attention for procurement, open standards, prevention of 'lock in' situations for educational

1 Council conclusions on moving towards a vision of a European Education Area, 7 June 2018.

2 Other specific synergies important for the DEAP are European Universities, expert group on microcredentials, Quality Assurance in the context of the University of the Future, EIT (and especially EIT Digital), OA/OS (open access/open signs) initiatives, Digital Opportunity Traineeships, Green Deal (including broad band connection /infrastructure), JTF (Just Transition Fund), ESF (European Social Fund), the new SME Strategy proposal, and the new Industrial Strategy proposal.

organisations. How to keep pace in national policies with internationalization of EduTech and bigtech firms like Google, Amazon and Microsoft? How to guarantee public values and develop public alternatives for services which are now only available via commercial companies ('make or buy')? How to promote open standards and open licensing? The recent COVID-19 developments have highlighted such questions even more in the Netherlands.

- Develop a **European EdTech Strategy.** A strategy should have a clear vision on a human-centric approach towards new digital education technologies. Each country will benefit from our shared action to enhance knowledge about innovation in education, while still respecting the national competence.
- It should also address developments and issues in relation to **application of AI in education**, how to best use the potential, how to address risks, ethical questions and challenges. The use of algorithms in education deserves special attention, not only in relation to privacy, but also from a pedagogical and inclusion perspective. A good connection should be made with the Digital Europe Programme (advanced skills), Horizon Europe, etc.
- Directly related to this are **issues linked to the use of (big) data**, how to improve (education) data quality, how to store these data safely, how to address ethical and privacy aspects, data protection in relation to the GDPR, how to guarantee that learners control their own data. Could we organize Data Protection Impact Assessments (DPIA's) at EU level? A good connection in answering these questions should be pursued with (the implementation of) the recent EU Data Strategy.
- **Flexibilisation of education** and relation to the labour market and lifelong learning should also be followed by digital changes, like the development of well-accepted digital credentials, digital badges and microcredentials. Here, a good connection should be made with the new Europass platform and its potential at EU level fully used.
- **Common standards for identity and access management** are crucial as well.

2. **Developing relevant digital skills and competences for the digital transformation:**
    - **Teachers' competences and new pedagogics** will be crucial. The EU could promote those via actions beyond current tools for self-assessment, while at the same time respecting the national responsibility and complexity of the challenge.
    - Given recent developments, more attention is needed for **artificial intelligence and data literacy in education**, among pupils, students and teachers at all levels (see also the recent EU Data Strategy, e.g. education of 'data stewards'). Higher Education should provide researchers with more advanced digital skills, and fulfil the needs for new professions like 'data stewards' which are created to support researchers when it comes to complex datasets.
    - **Digital literacy and critical media literacy** should be promoted, based on clear and consistent terminology and in relation to other EU actions related to disinformation and online threats. Actions should however have a clear added value at EU level (Action plan on disinformation, etc.).
    - **Digital competences for adults in a lifelong development perspective** have become important in a rapidly changing society and labour market. A strong link with the forthcoming strengthened Skills Agenda is necessary.
    - Addressing **gender digital gap issues**, also in relation to digital skills in the working population. How to raise the number of women working in ICT and AI? A good connection should be made here with (the implementation of) the Coordinated action plan on AI, the Commission's Communication on Shaping Europe's Digital Future and the forthcoming strengthened Skills Agenda.
    - Addressing **digital inclusion issues**. How to use the potential of digitalisation to improve chances of pupils from a lower socio-economic background or with special needs? What did Europe learn from the COVID-19 crisis and the sudden

introduction of distance learning? It is key to facilitate and guarantee the right conditions for families to overcome digital exclusion such as (i) access to digital infrastructure and support and (ii) ensuring that parents have adequate digital skills.

3. **Improving education through better data analysis and foresight**
    - We suggest that the third priority will be broadened to other ways to improve **evidence based policies on digital education**. Such as research and innovation, cooperation, sharing of best practices, etc.
    - **Innovation in digital education** should be promoted and supported by the EU, while fully respecting the national competence in this area. Lessons should be drawn out of the COVID-19 crisis and the impetus to digital distance learning. We would favour the EU to support by own research projects (e.g. by the Joint Research Centre) comparative country studies, pilot projects, standardization projects, experiments, development of (policy) scenarios and possibilities for scaling up of effective digital learning tools and capacity building at institutional level, supporting national policies notably by encouraging cooperation between knowledge institutions in digital research domains and pooling of investments in digital infrastructures.
    - To boost **scientific insight** aimed at improving education within the Member States, synergies should be found with European Research and Innovation funds, notably through the EIT and Open Science projects under Horizon Europe.

3. Implementation of the updated DEAP

EU policy on digital education has necessarily to be developed through a bottom-up approach, involving Member States and key stakeholders at EU level in education and training in continuous dialogue, feedback and consultations at all stages of the policy design and implementation. We have a number of considerations on the related governance aspects.

Even if we consider certain themes and objectives important to address at EU level, the Netherlands will always judge **concrete 'delivery mechanisms'** on their own merit on the basis of the subsidiarity and proportionality principle. We would in general favour instruments in the updated DEAP which stimulate new policy developments for digital education at national and regional levels, and support Member States and regions as well as their support organisations in implementing those policies. This could, for example, be done by policy frameworks and guidelines, practical tools, guidance documents, studies, education technology foresight, labour market forecasting, support for scaling up, interoperability, standardisation, etc. We would favour such general instruments with a higher 'leverage' and impact via national and regional policies. They would be more effective than EU measures in which the EU influences developments *directly* within national education institutions disconnected from national policy. Delivery mechanisms and envisaged target groups should therefore be considered carefully.

We would consider a **clear time frame** for the updated DEAP useful, taking into account the time needed for education reforms and the link with the EU programmes and frameworks. The period 2021-2027 would be logical. The main basis for such support should be the Erasmus+, Horizon Europe and Digital Europe programmes in the next MFF period 2021-2027, which also requires a good integration of digital education in their yearly and multi-annual planning cycles. Alternatively, the time frame could be linked with the foreseen new strategic framework for education and training (i.e. until 2030).

References have been made to the update of the DEAP in the recent EU Digital Strategy 'Shaping Europe's Digital Future', the EU Data Strategy, EU Industry Strategy, SME Strategy. The Netherlands welcomes this integrated approach, but we suggest to translate this also in a **clear implementation roadmap** for the DEAP which makes connections to these other strategies (vice

versa) and all other relevant initiatives at European level, with explicit milestones and moments of (political) reporting. Of course the new situation regarding the COVID-19 crisis should be taken into account. The diversity in background conditions and needs of the education sectors should be taken sufficiently into account when designing the implementation roadmap for the updated DEAP, so as to set a realistic timeline and goals.

In the area of education policy, the Commission will present a Communication on the European Education Area later this year which will most likely also contain a proposal for the **new strategic framework for cooperation in education and training** ('ET 2030'). We welcome a clear integration of digital education in this framework and its possible benchmarks and indicators[3]. The governance structure in this context should remain well connected with the governance of the DEAP, as is currently the case via the ET2020 Working Group DELTA, but also by good connection with the informal High Level Group on Education and Training, the DG meetings for Schools, VET and Higher Education, as well as the Advisory Committee on VET (ACVT). An objective could be also to organize exchanges on national strategies on digital education.

Referring to the ACVT already implies the **involvement of stakeholders**, in case of VET the social partners. But of course, a wider community of stakeholders should be involved in, or at least be aware of the actions at EU level resulting from the updated DEAP. As mentioned above, we suggest to involve key stakeholders at EU level to realize the highest impact.

One important group of stakeholders which should be involved more intensively in the next DEAP concerns **national and European support and cooperation organisations** for digital education, such as in our country Kennisnet[4], SIVON[5], SURF[6] and sambo-ICT[7], and at EU level Géant which is connected to 39 national research and education network (NREN) organisations[8]. The Commission should pay careful attention to the involvement of this particular subset of stakeholders and to the shaping of a 'European digital education ecosystem'. One could think of a more permanent cooperation structure and expertise centres. This also requires a good coordination between DG EAC, DG Employment and DG Connect within the Commission.

3 See non-paper sent by 15 Member States to the Commission in December 2019.

4 http://www.kennisnet.nl

5 http://www.sivon.nl

6 http://www.surf.nl

7 http://www.sambo-ict.nl

8 http://www.geant.org

Annex 1. Background information and experience with the current action plan

The essence of Dutch policy with regard to digitalisation in education

Digitalisation and innovation in education are approached differently in the various education sectors in the Netherlands. A common characteristic is a high degree of autonomy of the educational organisations in our country. Therefore digitalisation strategies are either made by the sectors themselves or in cooperation with the ministry. Support for the introduction of new technologies and policies on digitalisation by the government is however essential. The ministry of Education is therefore engaged in a permanent dialogue with schools and universities on issues relating to digitalisation. A broader context for the Dutch education policy on digital issues is the Dutch government's *Digitalisation Strategy* (2018) and the *Strategic Action Plan on Artificial Intelligence* (2019).[9]

In **primary and secondary education** the Dutch policy – as formulated in a *Digitalisation Agenda*[10] for this sector – focuses on the impact of digitalisation on education and on the content of education to prepare for a rapidly digitizing world. Five focus points are: innovate teachers, school leaders and administrators by learning together and with others, digital literacy and skills of pupils and teachers, digital learning resources for users, a safe, reliable and future proof digital infrastructure and attention for ethics of digitalisation. Kennisnet is the main support organisation for this sector, SIVON as cooperation of school boards is committed to achieve a better supply and demand on the education resources market. Relevant to mention is also that in the framework of modernisation of the curriculum for primary and secondary education, development teams of school leaders and teachers have recently presented proposals which include digital literacy as new learning area.[11]

Digitalisation is also important in **secondary vocational education (VET)**. The government considers it important that VET providers themselves take the lead, so that they can link the use of technology to the plans they have for further innovation and quality improvement. Knowledge is developed and shared, within and between institutions and different target groups, via the support organisation Sambo-ICT. The sector has set up a '*Get Through on Digitalisation Agenda*' and Sambo-ICT is the main support organisation for this sector. Efforts are also made to strengthen the link between education and businesses, for example through 'hybrid teachers' who work in both vocational education and training institutions and companies.

In **higher education**, digitalisation also serves as a means to improve the quality of education. The sector has set up an '*Acceleration Agenda*' and SURF is the main support organisation for this sector. The relationship between the student and the teacher is central. Many institutions are working hard to provide good support to lecturers with innovation and digitalisation. A high level of security of systems and protection of privacy are very important. The Dutch policy with regard to higher education focuses on the one hand on improving quality through innovative online teaching methods, and on the other hand on open learning materials. There is also targeted use of financial resources with as much room for experimentation as possible.

In order to make sure that everyone can participate the Dutch government is giving an extra impulse to promote basic skills in **adult education**. With the renewed action programme '*Tel mee met Taal 2020-2024'*[12], which includes the project '*Education for women with ambition'*, the Dutch government gives an extra impulse to promote basic skills (language, math and digital skills) in the wider population.

The Dutch government encourages various educational sectors to be open to common lessons and challenges and is, as indicated above, facilitating a permanent dialogue between sectors on their experiences in digital education. **Common lessons** which have been identified recently are: digital competencies of teachers; flexibilisation of education; use of data and ethical aspects thereof; learning resources; relation with the labour market and impact on innovation in education.

[9] https://www.government.nl/documents/reports/2019/10/09/strategic-action-plan-for-artificial-intelligence
[10] https://www.rijksoverheid.nl/documenten/publicaties/2019/03/22/digitaliseringsagenda-primair-en-voortgezet-onderwijs
[11] https://www.rijksoverheid.nl/onderwerpen/toekomst-onderwijs/toekomstgericht-curriculum
[12] https://www.telmeemettaal.nl/

Priorities and recommendations for the current DEAP

The current actions in the Digital Education Action Plan do not all fulfil national policy needs in the Netherlands, and seem - overall - to have had limited impact, at least in the Netherlands. Some we consider less important, and we are missing other actions which we would consider important in our national context, as described earlier in this non-paper.

Concerning the current Digital Education Action Plan actions we consider the following **less important** on the basis of the Dutch national policy needs: broadband connection (#1), digital assessment / Selfie (#2), European student card (#3), platform HE (#4), Open Science / Citizen science (#5) and Coding (#6).

However, we consider the current actions on digital qualifications and credentials (#3), cyber and media literacy (#7), gender issues (#8), research and strategic forecasting (#9), pilot projects AI and learning analytics (#10) **highly important.**